The Changing Landscape of Higher Education

By David J. Staley
and
Dennis A. Trinkle

The landscape of higher education—the growing variety of higher education institutions, the cultural environment, the competitive ecosystem—is changing rapidly and disruptively. The higher education landscape is metaphorically crossed with fault lines, those fissures in the landscape creating potential areas of dramatic change, and is as "seismic" as it has been in decades. Below we identify ten such fissures or fault lines in the larger landscape of higher education. Unlike the *Horizon Report,*[1] which looks largely at technology trends, we are looking at a context and environment wider than IT departments. Indeed, most of the fissures noted below are not technological, although they encompass significant technical implications. Those of us in information services and information technology need to be aware of these larger changes and the impact they will have on college and university IT departments and on academic computing. Consider this article advanced warning of potentially tectonic change. >>

ILLUSTRATION BY C.J. BURTON, © 2011

#1: The Increasing Differentiation of Higher Education

James Koch has wryly observed that if one read nothing but the *New York Times* education section, the reader would conclude that the system of higher education in the United States is made up only of selective liberal arts colleges. But as Koch correctly notes, "the higher education market now resembles the American restaurant market," with a wide range of choices: from gourmet five-star restaurants to fast-food franchises to food vendors.[2] Indeed, the mythology that undergraduate education is best represented by the ideal of the private liberal arts college is belied by the National Postsecondary Student Aid Study for 2007–2008 (the most recent data available), which revealed that 45.7 percent of undergraduates attend a public two-year college, forming by far the largest segment.[3] It is difficult to speak of a "system" of higher education in the United States unless one understands the system to be highly diversified—from selective colleges and universities to state schools to community colleges to for-profits, all offering different educational choices, serving different educational segments, and enrolling "customers" seeking different educational goals. *System* perhaps implies more integration than exists; *systems* (plural) is perhaps more accurate.

We should expect to see even more segmentation of U.S. higher education in the years to come. Indeed, the "multiversity" itself may be disaggregated. Given the size, scope, and complexity of many universities, it is plausible that some will "unbundle" their research, undergraduate teaching, athletic and outreach programs, and medical centers into separate enterprises—a "divide and conquer" strategy that would further segment U.S. higher education.

In the same way that the development and growth of community colleges in the 1960s and 1970s expanded the range of choices in higher education, the recent explosion in the number and extent of for-profit institutions has further differentiated higher education. For-profits have already begun to offer more than just career training and associate's degrees, moving into the bachelor's and graduate degree markets. For-profits may also begin to establish a research agenda: they will hire top research talent and seek to become noted for the quality and impact of their research, blurring the boundaries between the R&D work carried out by corporations and the research work conducted by for-profit higher education firms. We anticipate the emergence of more for-profit research entities like Xerox PARC.

In addition, there will likely be a host of other new entrants into the higher education space. The McDonald's management-training program, called Hamburger U, offers college credit to its students in the United States. In Great Britain, Manchester Metropolitan University has accredited Hamburger U's business management program, leading to a de facto associate's degree from McDonald's (with a bachelor's degree to follow). What had been an internal training program for McDonald's restaurant managers is now an accredited program with a degree that these managers can take to other jobs. McDonald's could also conceivably draw in non-McDonald's employees.[4] The training programs of large corporations could present an attractive alternative for many students; indeed, one can imagine a day when students will bypass traditional higher education institutions to go to work directly for companies like McDonald's and avail themselves of the degree-granting training programs provided there. What other for-profit corporations will seek to develop their own degree programs? Will museums, galleries, science centers, symphonies, zoos, and other cultural institutions similarly develop their own colleges and universities, leveraging their own unique talent pools?

Given the size, scope, and complexity of many universities, **it is plausible that some will "unbundle" their research, undergraduate teaching, athletic and outreach programs, and medical centers into separate enterprises**—a "divide and conquer" strategy that would further segment U.S. higher education.

#2: The Transformation of the General Education Curriculum

In survey after survey, corporate executives and the heads of their human resources departments say that they are looking to hire college graduates with well-developed writing, oral communications, and interpersonal skills and with global cultural awareness and understanding, whatever the graduates' majors might be. At the same time, these surveys suggest that employers have identified a deficit of these skills among college graduates. "While many businesses understand the value of hiring liberal arts graduates," notes Mark William Roche, "many hire business majors and then lament that their new employees lack the most important quality they seek: communications skills."[5] Students, assuming that employers are interested only in their majors, frequently dismiss their general education courses. Faculties, for their part, are loath to conceptualize their general education and liberal arts courses as career-preparation and skills-building endeavors. In other words, there are disconnects among employers' stated preferences for graduates with the skills typically developed in the general curriculum, employers' commitment to hiring graduates who have demonstrated ability in these subjects, students' seriousness of purpose for their general education courses, and faculty's commitment to see general education in practical, vocational terms.

"General education," or the core curriculum, is in many ways a vestige of the nineteenth-century common curriculum—the subjects, studied in sequence, that defined a college/university education for every student. The rise of the elective system at the turn of the twentieth century meant that students could concentrate on a subject of their choice, a change that challenged the philosophy that all students should master a common set of subjects. General education was meant to maintain at least the spirit of that older curriculum, mandating classes that would provide all students with a broad grounding in a variety of subjects that would enable a generally educated person to work and live in the world. After World War II, as more and more students streamed into colleges and universities, the elective system became wedded more closely to post-graduation employment needs: students majored in a subject they expected to pursue as a career.

In the current globally competitive, highly dynamic environment, job preparation is even more important to students, and the general education curriculum can appear tangential to those needs. General education has been defined both as a curriculum for broadening the mind—one of the hallmarks of an educated person—and as a way to prepare for active participation as a citizen. Students, however, seem less persuaded by these goals and apparently are not hearing from employers that the skills developed in the core curriculum have value. Students are hearing that these courses are a hoop to jump through before getting to the "real" coursework that is more directly applicable to real-world career preparation. Indeed, some colleges and universities, responding to what they perceive to be students' lack of interest, deemphasize general education. (At least one college has advertised to prospective students by telling them: "You're not required to take unnecessary courses. Every course is directly related to your chosen career path."[6])

Colleges and universities typically define general education in terms of content subjects: history, literature, sociology, the sciences, the arts. Indeed, the liberal arts are frequently held as the center of the core curriculum. Yet there is an emerging sense that general education should focus more on the key attributes that employers value as needed by a generally educated person: critical thinking, writing, speaking, arguing, researching, and mathematical reasoning. In addition to introducing a broad variety of subjects, general education should exercise skills and habits of mind.

Robert Sternberg contends: "We can do a much better job of college admissions, as well as instruction and assessment, if we think about student abilities in a broader way than we have—in particular, by valuing, assessing, and teaching for analytical, creative, practical, and wisdom-based skills."[7] Thinking in these terms has clear implications for how we imagine the general education curriculum. In addition to courses in history and physics, general education might also include coursework in areas such as analytical and verbal skills, creativity and innovation, entrepreneurship, the appreciation of complexity and ambiguity, and leadership.[8] At a time when most people will have a number of jobs before middle age and when many jobs have yet to even be developed, how can one train in a major that may not yet exist? The emerging skills-based general education curriculum provides an answer. Once thought of as issues of character—and thus unteachable—attributes and skills such as leadership and creativity will come to define the new general education curriculum.

#3: The Faculty Faces of the Future

A number of institutions, including the American Association of University Professors (AAUP), are driving educational campaigns to highlight the value of tenure-track and full-time instructors to the education experience. That they feel the need to launch marketing efforts defending tenure shows how much the landscape of higher education has changed in the past twenty years. The majority of instructors across most sectors of higher education and in higher education as a whole are now adjuncts, and surveys of parents and students suggest that they are largely satisfied with this trend. Compared with constrained costs and workforce relevance, tenured and full-time faculty are not strongly valued by parents and students.[9]

This cultural shift seems well-established for at least the short- and mid-term, and it carries important implications for information technology and information services. IT departments are well-positioned to help develop systems and processes to ensure consistent quality and experience for students across a dynamic pool of instructors. Numerous interactive, instructional, and assessment tools can be developed and implemented to enable adjunct-led courses to consistently reach high-level learning outcomes consistently. Much can be done with learning management systems, interactive and intelligent agents, automated

workflows, and other emerging tools to enable the effectiveness and success of adjunct instructors. Much can be done to develop and offer strong on-boarding and training programs for adjunct faculty members. And much can be done by incorporating assessment engines, automatic feedback agents, and interpretative heuristics into learning management systems and the business intelligence systems that academic leaders are using to review and coach faculty members.

If the employment landscape of higher education has shifted for the coming decades, a quality educational experience need not suffer. Information technology can play a critical role in helping new models of education and instruction reach even higher levels of outcome.

#4: The Surge in Global Faculty and Student Mobility

The United States may lose its unique place in the worldwide higher education landscape. After World War II, the global movement of students flowed largely to the United States. Today, the globalization of higher education means both that more students are traveling internationally for higher education and that they are not all going to the United States. From the unipolar world in which U.S. institutions of higher education dominated is emerging a multipolar world in which U.S. colleges and universities face competition for faculty and students from a host of new players. This is a key feature of the next phase of the globalization of higher education.

More students are traveling to, especially, Asia, whose universities have the potential to challenge U.S. colleges and universities in the global rankings. China, Saudi Arabia, and Singapore, among others, are looking to compete with U.S. institutions by spending large amounts of capital to build top-tier colleges and universities and to lure top talent. Peggy Blumenthal and Rajika Bhandari suggest that instead of thinking in terms of a "brain drain" from any one country, we might do better to think in terms of "brain circulation" or "brain exchange" between many countries.[10]

Competition for this globally mobile pool of talent explains why some U.S. colleges and universities are partnering with institutions in other countries or have set up their own "branch" campuses overseas. "Increasingly," notes Ben Wildavsky, "academic mobility can be understood not just literally—as comprising the travels of students, professors, and administrators—but also metaphorically, as a state of mind." This means that more institutions are viewing their missions in international terms. Wildavsky observes that the global movement of students is on par with the movement that occurred in Europe during the Middle Ages and that the current movement could have the same kind of far-reaching cultural effects as the earlier "brain circulation." "Knowledge changes the world," he concludes. "And with the right kind of encouragement, the far-reaching intellectual ferment now under way could have a transformational effect similar to that of the twelfth-century Renaissance of learning."[11]

#5: The New "Invisible College"

The term "invisible college" refers to the organization of scientific knowledge in the seventeenth century. It was a precursor to the Royal Society, composed of preeminent scientists in the United Kingdom who were scattered outside of formal institutions but were nevertheless in communication with each other and their work. As scientific work became increasingly situated in universities, such informal networks played a less important role in the organization and structure of scientific work, though they never disappeared. Now, in an age of digital networks, this older pattern of networked scientific work is reemerging, with consequences for how colleges and universities will organize and manage other kinds of knowledge work.

Caroline Wagner observes that the practice of science today is a similarly networked "new invisible college," facilitated through information technology rather than through letters, with individual scientists acting as nodes in a complex system. Features of this network of scientists include the principles of self-organization and emergence, where networked and self-organizing teams of researchers are responsive to new ideas and new research problems. Scientific work in this networked setting, notes Wagner, "has more in common with an ecosystem than with a corporation." Knowledge work is not based on a top-down command-and-control hierarchy. In this complex system, scientists combine and recombine in research teams based not on academic discipline or institutional affiliation or geographic location but on the unique requirements of the problems they want to address. Wagner describes this work as "distributed," meaning that "researchers no longer have to be in the same place as their collaborators, nor do they have to be in the same place as the problems they seek to solve."[12] These international networks are more important to individual faculty members than are their departmental or institutional ties.

The system represented by the new invisible college is international in scope and scale and is outside the direct funding and control of any national organization.

The new invisible college represents a challenge to the Big Science paradigm that has dominated since the end of World War II. The Big Science system was based on the idea of scientists working on behalf of national interests, funded and led by national agencies such as the National Science Foundation. The system represented by the new invisible college is international in scope and scale and is outside the direct funding and control of any national organization. It behaves almost like a high-tech version of the Republic of Letters, an Enlightenment-era network of scholars.

This newly emerging system of knowledge organization has implications for all higher education institutions, in that colleges and universities have been the dominant organizational forms for knowledge work since at least the days of the Republic of Letters. The networked paradigm represented by the new invisible college—global in scope, managed through self-organization and emergent behavior—reflects a knowledge-organization method very different from that of the top-down, hierarchical, command-and-control multiversity that operates much like a corporation. Anya Kamenetz has watched enough online TED talks to wonder if a new kind of knowledge organization is forming:

> If you were starting a top university today, what would it look like? You would start by gathering the very best minds from around the world, from every discipline. Since we're living in an age of abundant, not scarce, information, you'd curate the lectures carefully, with a focus on the new and original, rather than offer a course on every possible topic. You'd create a sustainable economic model by focusing on technological rather than physical infrastructure, and by getting people of means to pay for a specialized experience. You'd also construct a robust network so people could access resources whenever and from wherever they like, and you'd give them the tools to collaborate beyond the lecture hall. Why not fulfill the university's millennium-old mission by sharing ideas as freely and as widely as possible?[13]

These invisible college networks will not likely remain confined to the sciences, as social scientists and humanists will also begin to form globe-spanning networks. These emerging ecosystems of knowledge will coexist alongside—and compete with—today's colleges and universities.

#6: The Changing "Traditional" Student

In listening to many conversations about higher education, one could easily perceive that the norm consists of undergraduate students, eighteen to twenty-three years old, at liberal arts colleges. William Clohan, former undersecretary of education and policy advisor to the U.S. House of Representatives, recently captured the transformation: "We call students over twenty-five who are working full-time non-traditional students because when they first entered education research and policy discussions, they differed from the traditional undergraduate student. Today, these 'non-traditional' students are the majority of the student population in higher education. More than sixty percent of students enrolled are now over twenty-five and more than sixty percent of students are now working full-time while pursuing their education. We should start using a new term to describe these students."[14]

This changed demographic signals the importance of speaking carefully about the type of educational institution and the particular student needs being addressed. We can no longer generalize from the base and traditional needs of students eighteen to twenty-three years old. This tectonic shift will compel many new conversations and directions in higher education.

These shifts should remind IT professionals to think carefully about the students being served—their backgrounds and needs. To direct and shape services and resources, IT professionals need very targeted and specific understandings. Constant reality checking is also important. Since so much of higher education analysis presumes the eighteen-year-old student, it is easy to become lulled into extrapolating lessons that might not apply at all institutions. For example, at an institution that focuses on adult learners, an analysis of social media tools for next-generation learners might be well off the mark for the student population. Social media tools might still be critical, but in fundamentally different ways. The primary lessons from this fissure are that IT professionals need to know and focus on the particular demographics of their student population and that they need to consider research and policy analysis through the right lenses for the institution.

#7: The Mounting Pressure to Demonstrate the Value Added of a College Degree

The U.S. headlines this past summer were dominated by the close congressional scrutiny of the for-profit higher education sector.[15] Congress drew attention to the size of the (government-backed) loans taken out by students at some for-profits, comparing these to the kinds of substandard jobs these students were taking after graduation. The U.S. Senate Committee on Health, Education, Labor, & Pensions hearing, chaired by Senator Tom Harkin, concluded that the training these students received was so inadequate that the students were not able to secure employment at a high-enough pay grade to allow them to cover their loans for this (seemingly) poor-quality education. Congress pressed for a "gainful employment" provision, meaning that these unscrupulous for-profits would need to demonstrate that their graduates received sufficient training and education to achieve employment that would allow them to at least cover their loan obligations.

Those at non-profit higher education institutions may find it easy to scoff at for-profits, but there are several indications that all institutions of higher education will begin to face scrutiny about "gainful employment" and the value of

a degree in the marketplace. Students at traditional colleges and universities have also taken out sizable loans to complete their studies, and some are failing to land even entry-level jobs that match the skills they have trained for. (The PBS NewsHour journalist Paul Solman calls these workers "malemployed."[16]) Although this is as much a function of the recent recession, it nevertheless points to a rising trend: more "customers" of higher education are questioning the value of a college/university education. This leads to something of a contradiction: government and business leaders agree on the absolute criticality of more Americans attending college and gaining higher degrees, but simultaneously, Americans have less confidence that colleges and universities are preparing students well and providing good value. The countervailing mood suggests that colleges and universities must clearly prove their value and outcomes. A commonplace assumption since the end of World War II has been that a degree equates to a better job, higher earning potential, and a comfortable middle-class existence. This assumption is being challenged.

All higher education institutions will start to develop new metrics and new forms of proof of the value added from their degrees. Specifically, colleges and universities will develop assessments and other metrics—such as the widespread use of pre- and post-testing—that measure the specific impact various coursework has had on students' skill levels and intellectual development. Using data-mining tools, institutions will start linking their transcripts to wage data records, drawing connections between success at school and success in the workplace. Colleges and universities will track not only the employment success of their students (e.g., first job) but also the career path of all their graduates (e.g., second and third jobs and promotions received) as a way to demonstrate the value of an institution's degree. Prospective students will compare the career trajectories of graduates of various schools when deciding which institution to attend. College-ranking systems will include these "value-added" scores in addition to other measures.

Part of this reassessment of higher education will center on the value of a degree versus the value of other credentials, such as certificates. In a growing number of fields, a certificate is a perfectly sufficient credential for employment, especially in several "middle-skill" positions. Indeed, students may prefer to collect a succession of certificates over the course of their working lives rather than earn a degree at the start of their working lives. In this sense,

higher education will increasingly consist of just-in-time training over a lifetime, a trend that will affect both admissions and alumni relations.

#8: The Revaluation of "Middle-Skill" Jobs

"Middle-skill" jobs are defined by the Bureau of Labor Statistics (BLS) as those between high-skill jobs, which require abstract reasoning or technical specialized knowledge, and low-skill jobs, which are found at the low-paying end of the service sector. In educational terms, middle-skill jobs require more than a high school diploma but not a full bachelor's degree. Middle-skill jobs are usually identified as those in the skilled trades—occupations that involve building, fixing, making. Some observers have argued that there has been a "hollowing out" of these middle-skill positions, with increasing demand for both high-skill and low-skill jobs, squeezing out the middle-skill trades. But BLS projections suggest that there will still be a demand for jobs at this middle level, especially as baby boomers retire.[17]

Demand will certainly remain for high-skill positions, such as engineers and designers. But it is also clear that the value of the skilled trades is rising relative to "symbolic work." "BLS projects that nearly half (about 45 percent) of all job openings between 2004 and 2014 will be in middle-skill occupations. This compares with one-third (33 percent) of job openings in the high-skill occupational categories and 22 percent in the service occupations," report Harry J. Holzer and Robert I. Lerman. There will be implications for higher education: "The demand for middle-skill workers will remain quite robust relative to its supply, especially in key sectors of the economy. Accordingly, accommodating these demands will require increased U.S. investment in high-quality education and training in the middle as well as the top of the skill distribution."[18]

Not only will there need to be a supply of such courses and programs to train these middle-skill workers, but the placement of the pedagogical value of practical skill above theoretical skill could have important consequences for a broad range of curricula, especially general education. All students might benefit from a curriculum that introduces them to the trades. Camille Paglia has claimed:

> We need a sweeping revalorization of the trades. The pressuring of middle-class young people into officebound, paper-pushing jobs is cruelly shortsighted. Concrete manual skills, once gained through the master-apprentice alliance in guilds, build a secure identity. . . . In a period of global economic turmoil, with manufacturing jobs migrating overseas and service-sector jobs diminishing in availability and prestige, educators whose salaries are paid by hopeful parents have an obligation to think in practical terms about the destinies of their charges. That may mean a radical stripping down of course offerings, with all teachers responsible for a core curriculum. But every four-year college or university should forge a reciprocal relationship with regional trade schools."[19]

The placement of the pedagogical value of practical skill above theoretical skill could have **important consequences for a broad range of curricula, especially general education.** All students might benefit from a curriculum that introduces them to the trades.

More higher education institutions might develop their own colleges of the trades, in addition to colleges of the arts and sciences, business, and engineering.

#9: Higher Education as a Private Rather Than a Public Good

James Duderstadt, the former president of the University of Michigan, once noted that his school had watched its funding from the state diminish so much over the years that it had been "forced to evolve from 'state-supported' to 'state-assisted' to 'state-related' to what might only be characterized as 'state-located.'"[20] As many state budgets strain under debt loads, states have reduced their support to colleges and universities. Some of these institutions, like the University of Michigan, are reaching the stage where they may begin to consider cutting off what is left of state support and functioning instead as a private institution. It is possible that large state institutions, many of which already receive relatively smaller and smaller percentages of their funding from state government sources, will declare financial independence from the state and, as a result, will obtain governing independence as well.

This is part of a much broader trend toward privatization in higher education—meaning, among other things, that the burden of support is increasingly falling on individuals. This has recently been demonstrated in the California system. Because of its devastating budget situation, which has necessitated increasing tuition system-wide, more individuals are bearing the costs of higher education. This is especially noteworthy when looking at rising textbook prices. Over the past few years, the costs of textbooks have outstripped the rate of tuition increase. For many community college students, textbook prices are often cost-prohibitive, preventing many students from continuing their studies. These prices come as a shock for many parents and students who have attended public schools and for whom textbooks were a public educational technology, like a blackboard or desks and chairs, and thus were part of the overhead of a public education.

While we continue to speak about the public benefits of higher education—society needs educated citizens, businesses need trained workers—the costs of these

public benefits are increasingly being born by individuals and private entities.

#10: Lifelong Partnerships with Students

Recently, the Wharton School of the University of Pennsylvania announced that it had established a lifelong "knowledge partnership" with graduates of its program. According to the announcement, all graduates of Wharton will have the opportunity to return for free, one-week executive-training professional development every seven years—in effect, a sabbatical for "alumni."[21]

We place "alumni" in quotation marks as a way to signal a newly emerging relationship with matriculated students. Today, when students graduate from an institution, they become "alumni"—former students who are no longer a daily part of the community and who are connected to the college or university largely as a potential funding source. But more higher education institutions will continue their formal relationships with matriculated students after graduation. Indeed, the degree will not mark the end of the relationship but, rather, the passing of one phase of that relationship to another. Students may seek certificates from a college or university early in their careers, earn a degree or advanced degrees later in their lives, and return periodically for short courses and other professional development opportunities throughout their careers. In effect, the student never leaves or matriculates: the student remains a part of the network of professional relationships that the institution represents. This is not just a metaphorical connection; it is an ongoing and active relationship. Students will pay a lifelong tuition fee to belong to this network and will receive what amounts to "service after the sale" after graduation. When they change jobs and require new skill sets, they will look to their alma mater for continued training. They will seek career counseling and indeed will continue to keep a university-affiliated career counselor "on retainer" throughout their careers. When they retire, many of these students will access their alma maters for cultural and intellectual opportunities that may not have been of interest to them or that they may not have had time for when they were younger. As they age, the institution will be a source of "brain exercise" (just as a membership in a gym provides physical exercise). All of these services will be factored in to the cost of education, which will be extended across a lifetime, not just four to six years. As students find information and knowledge from alternative sources, they will look to their colleges and universities as networks of service and professional relationships.

■■■

Many readers of *EDUCAUSE Review* may envision innovation in higher education arising largely as a result of rapid changes in technology and new media. But focusing strictly on technology trends blinds us to other environmental factors that are drivers for change in higher education. Indeed, these trends will likely have an impact on IT departments. For example, as colleges and universities alter their connections with alumni, developing lifelong relationships and continued service models, these institutions will need more robust tracking tools and metrics to assess their students' career paths. Invisible college networks will surely require reliable IT platforms. IT professionals will need to reassess pedagogy and curriculum as programming and coding join the roster of general education competencies. Those colleges and universities that understand how to harness and leverage these tectonic shifts in the larger environment will be best positioned to lead disruptive innovation in higher education. ■

Notes

1. *2010 Horizon Report:* <http://www.educause.edu/ELI/2010HorizonReport/195400>.
2. James V. Koch, "The Multifurcation of American Higher Education," in Gary A. Olson and John W. Presley, eds., *The Future of Higher Education: Perspectives from America's Academic Leaders* (Boulder, Co.: Paradigm Publishers, 2009), p. 27.
3. "Who Are the Undergraduates?," *Chronicle of Higher Education*, December 12, 2010, <http://chronicle.com/article/Who-Are-the-Undergraduates-/123916/?sid=at&utm_source=at&utm_medium=en>.
4. Ben Wildavsky, "Yes, McDegrees Are Worth Taking Seriously," *Chronicle of Higher Education*, November 29, 2010, <http://chronicle.com/blogs/worldwise/yes-mcdegrees-are-worth-taking-seriously/27621>.
5. Mark William Roche, *Why Choose the Liberal Arts?* (South Bend, Ind.: University of Notre Dame Press, 2010), p. 13.
6. "Welcome to Bryan College," <http://www.bryancolleges.edu/>.
7. Robert J. Sternberg, *College Admissions for the 21st Century* (Boston: Harvard University Press, 2010), p. x.
8. Roche, *Why Choose the Liberal Arts?*, pp. 52–53.
9. On faculty status, see "Trends in Faculty Status, 1975–2007" (compiled by the American Association of University Professors), <http://

www.aaup.org/NR/rdonlyres/B0D26AE9-D1BA-4E7C-B228-5D05347B9CAA/0/TrendsinFacultyStatus2007.pdf>. On perceptions of tenure, see Cary Nelson, "Parents: Your Children Need Professors with Tenure," *Chronicle of Higher Education*, October 3, 2010, <http://chronicle.com/article/Parents-Your-Children-Need/124776/>.

10. As noted in Ben Wildavsky, *The Great Brain Race: How Global Universities Are Reshaping the World* (Princeton, N.J.: Princeton University Press, 2010), p. 27.
11. Ibid., pp. 29, 198.
12. Caroline S. Wagner, *The New Invisible College: Science for Development* (Washington, D.C.: Brookings Institution Press, 2008), pp. 4, 5.
13. Anya Kamenetz, "How TED Connects the Idea-Hungry Elite," *Fast Company*, issue 148 (September 2010), <http://www.fastcompany.com/magazine/148/how-ted-became-the-new-harvard.html>.
14. William Clohan, "What Does It All Mean," session at the APSCU (Association of Private Sector Colleges and Universities) Symposium 2010, Washington, D.C., December 9, 2010.
15. Kelly Field, "Lawmakers Focus Ire on Accreditors for Abuses at For-Profit Colleges," *Chronicle of Higher Education*, August 4, 2010, <http://chronicle.com/article/Lawmakers-Focus-Ire-on/123771/>; Mike Lillis, "Enzi Blasts 'Gainful Employment' Proposal on For-Profit Schools," Healthwatch blog, *The Hill*, September 20, 2010, <http://thehill.com/blogs/healthwatch/other/119769-enzi-blasts-gainful-employment-proposal-for-for-profit-schools>; Doug Lederman, "Sector Under Siege?," *Inside Higher Ed*, June 11, 2010, <http://www.insidehighered.com/news/2010/06/11/cca>.
16. Paul Solman, "Malemployed College Graduates Cope with Discouragement," *The Business Desk*, December 6, 2010, <http://www.pbs.org/newshour/businessdesk/2010/12/more-from-the-dog-walkers-to-d.html>.
17. Harry J. Holzer and Robert I. Lerman, "America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond" (Skills2Compete, November 2007), p. 4, <http://www.urban.org/UploadedPdf/411633_forgottenjobs.pdf>.
18. Harry J. Holzer and Robert I. Lerman, "The Future of Middle-Skill Jobs" (Center on Children and Families, Brief #41, February 2009), p. 1, <http://www.brookings.edu/~/media/Files/rc/papers/2009/02_middle_skill_jobs_holzer/02_middle_skill_jobs_holzer.pdf>.
19. Camille Paglia, "Revalorizing the Trades," *Chronicle of Higher Education*, August 29, 2010, <http://chronicle.com/article/Revalorizing-the-Trades/124130/>.
20. James J. Duderstadt, *The View from the Helm: Leading the American University during an Era of Change* (Ann Arbor: University of Michigan Press, 2007), p. 145.
21. Dan Berrett, "Wharton, Rebooted," *Inside Higher Ed*, December 7, 2010, <http://www.insidehighered.com/news/2010/12/07/wharton>.

David J. Staley (staley.3@osu.edu, David.Staley@harrison.edu) is Director of the Goldberg Center at The Ohio State University and is National Dean for General Education at Harrison College.

Dennis A. Trinkle (Dennis.Trinkle@harrison.edu) is Provost and Chief Academic Officer at Harrison College.