

# Voluntary Counter-Reformation: STEPPING UP TO THE CHALLENGE

By William H. Graves

**T**he political philosophy (from the U.S. Declaration of Independence) that “all men are created equal” succinctly captures the *raison d’être* and phenomenal successes of American higher education. Today, the deepest commitment to this idea of fair play is affordable access to a higher education that offers the opportunity to cultivate knowledge, envision and pursue a rewarding and better future, and learn to condition the “pursuit of happiness” by a commitment to the common good. And even though higher education is not an entitlement at any level of U.S. government, numerous national reports argue that higher education must continue to be an affordably accessible opportunity for all Americans as the basis for innovation, economic development, and a national competitive edge in the hypercompetitive global knowledge economy.

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Public revenues allocated to higher education are on a different trajectory, however. The amount of higher education's revenues coming from public sources has been decreasing relative to the amount originating from private sources. For all but the relatively few "well-endowed" institutions, the growing dependence on private revenues translates directly into a greater



drain on students' private resources, thereby putting affordability of access at risk for those students least able to pay and/or the families and employers supporting them. Higher education accordingly is lobbying for increased public revenues, but it is doing so while the federal debt, deficit, and commitment to defense are burgeoning and contributing to a diminishing federal per-capita contribution to help states fund federal mandates and entitlements. As a result, prudence suggests that higher education not only should seek increases in public per-student revenues but also should help ensure the affordability of access for future generations by pursuing innovations designed to reduce per-student operating expenses.

### External Calls for Measurable Performance Improvement

Affordability of access is a key factor behind the external policy pressures facing higher education today. Of these external pressures, perhaps the primary one for the foreseeable future is the call to improve and account for institutional performance in publicly transparent and measurable terms.<sup>1</sup> Focusing on undergraduate and professional education, for example, the Secretary of Education's Commission on the Future of Higher Education, appointed by Secretary Margaret Spellings in September 2005, invoked the quantitative connotation of *performance*: "To meet the challenges of the 21st century, higher

education must change from a system primarily based on reputation to one based on performance."<sup>2</sup>

In its final report of September 2006, the Spellings Commission argued for measurably improving and accounting for performance—in student learning, in the timing and capacity to meet market demand for degree and certificate programs, in the response to students' requirements for flexibility, and in the containment of per-student costs and the net tuition prices driven by those costs. These pressures are often described using terms such as *affordability*, *accountability*, *accessibility*, *accreditation*, *productivity*, *return on investment*, and *institutional effectiveness*. Two of these terms, *accountability* and *accessibility*, can be parsed to capture all of these external policy pressures, in the form of six overlapping *performance obligations*:

- **Learning Accountability:** Measure and openly report learning outcomes in ways that permit comparisons among peer institutions
- **Program Accountability:** Respond rapidly to economic development and workforce needs with appropriate degree and certificate programs
- **Expense Accountability:** Reduce or stabilize per-student operating expenses (to increase institutional productivity)
- **Affordability of Access:** Reduce or stabilize inflationary increases in net tuition borne by consumers (to keep higher education affordable for all qualified students)
- **Convenience of Access:** Offer students convenient, flexible options for completing a degree or certificate
- **Capacity for Access:** Manage enrollment capacity in response to demand

A full reading of the Spellings Commission's report reveals that the word "reputation" in the earlier quote connotes "prestige" or "selectivity." For community colleges and market-focused for-profit institutions, "reputation" is generally based on effective and efficient performance. Many nonprofit institutions, however, aspire to earn reputations based on prestige—and a few have done so. Prestige is typically earned and ranked on some combination of the achievement profile

of incoming students, the faculty's record of scholarship and research, success in a major NCAA sport, and even campus grounds and facilities. Prestige can also be readily assessed today by the size of annual endowment earnings relative to total annual operational expenditures. Significant endowments are no longer the sole domain of prestigious private research universities and "national" liberal arts colleges.

Still, because only ten institutions make it into any top-ten ranking and because significant endowments are not easily developed, pursuing prestige is a high-risk aspiration for most institutions. The Spellings Commission is advocating a more attainable meaning of "reputation," a definition based not on absolute rankings among peer institutions but on external stakeholders' zero- to four-star ratings of their satisfaction with how well a nonprofit institution performs against the measurable mission obligations and aspirations that are its stated 501(c)(3) charitable purpose. Thus, the future reputation of American higher education may depend less on its internal expert quality reviewers and more on those who "consume" it and those who help fund its consumption. For this reason, the Council for Higher Education Accreditation (CHEA) and its network of advisors and accreditors are currently exploring new ways to respond, through self-governance, to calls for increased and more open accountability—calls that have become a focal point for the Department of Education's post-Spellings Commission "negotiated rulemaking" process.<sup>3</sup>

Some higher education leaders have publicly opposed various recommendations of the Spellings Commission. They argue, for example, that the commission's recommendations could indirectly lead to government-controlled standardized testing or to governmental intrusions into privacy and into current self-governing accreditation processes. On the other hand, other leaders have advocated a voluntary, proactive response to many of the commission's recommendations and to other external calls for measurable performance improvement and for the creation of standards for publicly and transparently reporting performance. For example, the National Association of State Universities and Land-Grant Colleges (NASULGC),

with participation from the American Association of State Colleges and Universities (AASCU), has drafted a “Voluntary System of Accountability” for consideration by member institutions.<sup>4</sup>

## Enter IT

Although some changes to the current higher education model could structurally increase productivity (changes such as reducing the amount of coursework required for a baccalaureate degree), a more systemic productivity lesson lies in recent trends in the national/global economy. Companies and most nonprofit organizations have embraced IT as the primary tool available for innovatively redesigning production and business service processes to become systemically and simultaneously more flexible, more effective, and more efficient—in sum, more productive. These advances in the services sector would have been impossible without a high-performance IT organization and without leaders who embraced and managed the discipline required for IT-enabled redesign.

Yet improved productivity does not result solely from high-performing, well-managed IT services. In his book *The World Is Flat*, Thomas Friedman put it this way: “Introducing technology alone is never enough. The big spurts in productivity come when a new technology is combined with new ways of doing business.”<sup>5</sup> In other words, IT is a necessary but not

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sufficient ingredient in any systemic attempt to improve productivity. Friedman also argues, with compelling examples, that competitively innovative “new ways of doing business” typically incorporate some combination of eight IT-enabled external sourcing models: outsourcing, insourcing, open sourcing, offshoring, supply chaining, in-forming, work flowing, and steroiding (IT “doping”).

A recent report recommending radical change in the K–12 educational system recognized the value creation enabled by these various forms of external sourcing: “Today, the United States is once again a leader, this time in the deconstruction of the vertically integrated firm. Corporate analysts identify each step in the process and ask whether the firm is a leader in that step, and, if not, who in the world can do that step at the needed level of quality at the lowest possible cost. The firm then contracts with the best providers of each of those services and keeps only those functions that it can do best. . . . Firms that do not do this will inevitably be put out of business by firms that do.”<sup>6</sup>

This new, IT-enabled *external sourcing strategy* can increase expertise, nimbleness, effectiveness, and efficiency, especially when combined with, or incorporated into, two other strategies for IT-enabled higher education process redesign. These are the *flex strategy* and the *common course strategy*.<sup>7</sup> The flex strategy redesigns academic and administrative services and programs to provide options for individual customization while eliminating or relaxing inflexibilities and inconveniences in their delivery. The common course strategy was pioneered by the National Center for Academic Transformation (<http://www.theNCAT.org>). This redesign strategy is used to improve learning while also reducing direct institutional expenses for the common high-enrollment courses, which account for a significant percentage of all enrollments at most institutions.<sup>8</sup>

An institution can combine the flex, common course, and external sourcing redesign strategies in institutionally unique projects to create engaging and effective student learning experiences that will remain affordable for generations to come. Consider, for example, the following three scenarios:

■ **Scenario 1:** Two- and four-year public institutions in high-growth states and communities often face capacity-of-access challenges and related program accountability and learning accountability obligations. Some institutions react by (1) capping enrollments among existing and would-be students in high-enrollment required and elective

general-education and developmental courses and also in required courses in high-demand majors, and (2) turning away qualified applicants to nursing, teacher education, and other professional and workforce programs aimed at producing the graduates most needed for the societal and economic advancement of the nation, states, and local communities.

■ **Scenario 2:** Two- and four-year public institutions in a number of states and communities face learning accountability and program accountability obligations. For example, some are being asked to improve the college-going rate among high school graduates, improve retention rates, increase the proportion of degree-holders in the citizenry, help those students who stopped short of a degree to now complete their degrees, and increase the supply of graduates in programs aimed at workforce and economic-development goals—nurses, teachers, science and technology professionals, and so on.

■ **Scenario 3:** A number of private and public institutions are facing declining enrollments and/or are looking for innovative ways to increase “profitable” enrollments in high-demand niche markets in order to (1) survive and grow as a tuition-dependent private or public institution, (2) retain or increase the current level of per-student-FTE-based public funding, and (3) increase out-of-state or other profitable tuition revenues as a public institution.

The flex redesign strategy, when applied to services and selectively to common courses and high-demand programs, increases *convenience of access* and, with it, student options and satisfaction. It can reduce or eliminate the need for new classroom capital expenses and reduce the capacity strain on the existing classroom plant, thereby improving the *capacity for access* and the unit-cost basis for *expense accountability*. It also can improve (1) the *affordability of access* for students by eliminating or reducing any on-campus living expenses and travel expenses, and (2) *program accountability*, because much of the most pressing program demand and access need is from flex

students who cannot or will not participate in traditional instruction. When combined with the flex strategy, the common course redesign strategy can measurably improve learning—and, thus, *learning accountability*—while simultaneously increasing the faculty dimension of capacity (student-to-instructor ratios), thereby directly reducing per-enrollment costs to improve *expense accountability* and the *affordability of access*. So, all six of the institutional performance obligations can be addressed by using the flex strategy with reinforcing help from the common course strategy, and some institutions are doing so. In the examples below, each institution also selectively applied the external sourcing strategy through a commercial partner.

- The goals for the Tennessee Board of Regents (TBR) campus collaborative Regents Online Degree Programs (RODP) and Regents Online Continuing Education and Workforce Development (ROCE) were precisely those described in scenario 2 (<http://www.rod-p.org>). RODP offers well-articulated online degree programs, professional/continuing education certificates, and workforce development training collaboratively developed and delivered by TBR's six universities, thirteen community colleges, and twenty-seven technology centers. RODP first enrolled students in the fall of 2001 and was an instant success, as evidenced by the immediate and ongoing need to cap enrollments in order to ramp up faculty capacity to accommodate today's approximately 15,000 annual for-credit enrollments. An RODP student must select, qualify for, and be admitted to a "home" TBR institution from which to earn a degree. An institution's RODP student may enroll in and transfer credits from RODP courses taught by other TBR institutions. All of the student's course tuition goes to the teaching institution, and for any course, the student pays an additional 40% of tuition as a course fee to be split between the home institution (30%) and TBR (70%). The 70% share pays for system-wide library databases, hosting, help desk, IT upgrades, course management and development, training, professional

development, and operations—all to support and sustain the collaboration and achieve economies of scale. The RODP collaboration among TBR institutions reduces program and service duplication across the system and optimizes the use of public resources—this is system leverage at its best.

- Broward Community College (Florida) and Ocean College (New Jersey) offer flex nursing programs and have reduced their backlogs of nursing applicants while increasing the supply of degree-holding nurses in their local communities, all in response to some of the issues in scenarios 1 and 2.
- The University of Baltimore turned around a pattern of decreasing enrollments by offering one of the first AACSB-accredited fully online MBA programs. The university has met its financial and enrollment-increase goals and is now offering additional flex programs. Benedictine University (Illinois) has similarly increased its profitable enrollments with a flex MBA offering. Both of these examples fit the framework of scenario 3.
- The Community College of Southern Nevada has had to cap enrollments in a number of common courses and turn away applicants to its AA program and a number of other high-demand programs, as described in scenario 1. In response, it is redesigning those common courses and high-demand programs for flex delivery, improved learning outcomes, and reduced direct per-enrollment expenses. The college is attempting to improve institutional metrics for all six performance obligations.

In thinking about these redesign strategies and how they might be combined, institutions can devise additional strategies, some representing paradigm-shifting innovations. Consider, for example, the Antioch University Ph.D. in Leadership and Change. The Antioch program is a "courseless" flex program created around the concept of a learning community and the assessment of student learning outcomes. It combines theoretical and case study readings with group discussions conducted online and in quarterly intensive residencies (three four-day residencies and one

seven-day residency). Students design and complete individualized demonstrations of learning, which are reviewed, discussed, and evaluated online by the program's core faculty with expertise in the area of study. In four of the fifteen demonstrations of learning, the students also study with—and their work is assessed by—"mentors," external practitioners and scholars who work in consultation with the program's core faculty members. External scholars not otherwise connected with the program are also part of the dissertation-review process, to ensure academic quality. The program achieves individualized learning intimacy in the context of a vibrant learning community by emphasizing a cohort model (based on annual entrance), by requiring three years of participation in short-term, intensive, face-to-face residencies, and by creating a dominantly online learning community based on weekly online group discussions facilitated by a faculty member, individual online discussions between faculty members and students regarding their learning demonstrations, and continuous and often very personal e-mail interactions among the students. The model is an exemplar of a paradigm-shifting innovation that



radically deviates from current learning-delivery and degree programs. Although the Antioch program is at the doctoral level, it can scale to the undergraduate level with the quality-assuring help of external mentors and/or independent learning assessments, such as the Collegiate Learning Assessment of basic fluencies and critical-thinking skills or the general-education and introductory-course assessments from the College Board and Educational Testing Service (ETS). Indeed, Westminster College in Salt Lake City is undertaking a redesign initiative to pilot an Antioch-inspired program at the undergraduate level.

## A Culture of Performance

Institutional leadership and disciplined innovation through IT-enabled service process redesign are the main ingredients in the “secret sauce” for improving productivity and mission outcome performance. Leaders must align a well-managed institutional IT organization with academic and other service goals.<sup>9</sup> But doing so requires timely access to consistent institutional information within a culture of evidence.

Higher education leaders recognize that IT plays an enabling role in accounting for performance. The bulk of institutional data, after all, is stored in the institutional ERP transactional system. Many higher education executives, however, bemoan both the lack of “cleanliness” of institutional data (i.e., disparate answers to a common query) and a flood of reports that result more in confusion than in

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insights into performance. Their frustrations typically arise from shadow systems that are maintained at the departmental level in order to avoid relying on a common institutional system or granting open access to department-level data (which legally can and should be shared more broadly). Even the latest ERP systems, the cleanest data, and the best of executive intentions are not sufficient for reporting performance in ways that are customized to meet the needs of each level of management and functionality. In contrast, effective *performance reporting and analytics* draw on the ERP system and other sources of institutional or external benchmarking data to:

- rescue chief executives from a flood of data reports that are difficult to develop and ultimately not of much use at the cabinet level;
- extract select longitudinal data into an institutional data warehouse modeled

around a few strategic performance objectives and indicators;

- provide flexible, *ad hoc* (anytime) performance reporting and predictive analytics, both at the operational and the longitudinal (trend) levels; and
- provide configurable, flexible scorecards (executive level) and dashboards for monitoring key performance indicators at the institutional and departmental levels and for exposing the departmental dependencies underlying those indicators in order to identify trends and provide actionable insights into remediation strategies and futures planning.

Implementing and evolving performance reporting and analytics begs some critical questions. What key performance indicators should be tracked and reported, to whom, and on what longitudinal schedules? Who should have *ad hoc* access to these indicators and to the data and analytics that determine them? A cabinet-level group of administrators and academic leaders—a “performance council”—should tackle these and other key questions and not leave decision-making solely to the IT and institutional research staffs. Operating under a name appropriate to the institution and with the “ownership” and monitoring participation of the chief executive, the performance council, perhaps with help from expert consultants (external sourcing strategy), must initially identify key performance indicators and thereafter continue to engage in *performance planning and management processes* designed to

- align mission goals with measurable objectives and their key performance indicators;
- translate the results of this process to the technical and institutional research teams responsible for implementing and evolving performance reporting and analytics;
- guide the creation of institutional performance management processes that are open and evidence-driven;
- align innovative service redesign strategies with key performance indicators requiring improvement;
- form redesign teams to apply IT-enabled redesign strategies to improve on those key performance indicators; and

- prioritize and secure resources for enabling the redesign teams’ performance improvement projects and for making the institution more productive.

Performance planning and management processes both inform and are informed by performance reporting and analytics and should result in an institutional culture of evidence. A culture of evidence, however, is not necessarily a culture of performance. Action is required in the form of *performance improvement redesign projects*, which use IT to redesign key academic and other service processes as described in the preceding section. Such projects can

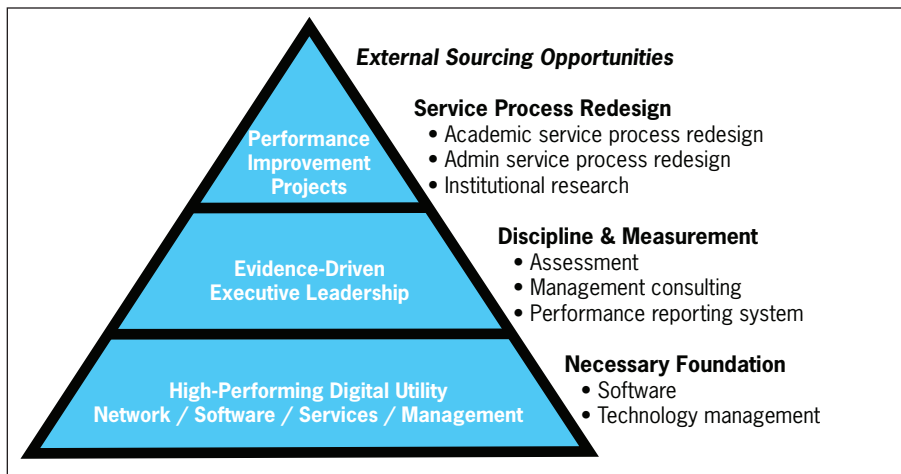
- redesign business and student service processes for efficient Web site and portal-integrated self-service,
- redesign degree programs for “flex” delivery to targeted audiences (the convenience factor of online asynchronous pedagogy),
- redesign the cluster of high-enrollment common courses to improve learning and the per-credit direct cost of instruction, thereby also increasing capacity (a reduction in per-credit direct instructional costs usually translates into an increase in the student/faculty ratio),
- redesign enrollment-management processes for both recruiting and retaining the desired students, and/or
- source business and student service processes, IT services, and other services selectively from external organizations to avoid new capital and payroll costs while improving services at reasonable per-student costs.

Figure 1 depicts the necessary technical and change-management dependencies from which a higher performance institution can evolve under disciplined and evidence-driven leadership. Figure 2 focuses on performance planning and management processes and a corollary performance improvement redesign project life cycle.

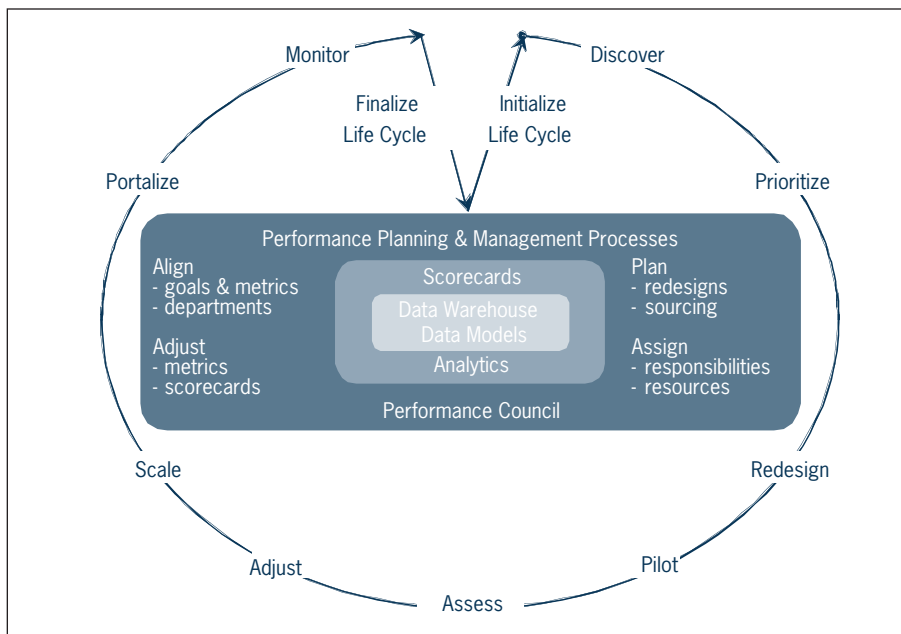
### Got Discipline?

Michael Treacy and Fred Wiersema offer the enduring business-guru advice: “Choose your customers, narrow your focus, dominate your market.”<sup>10</sup>

**FIGURE 1. A CULTURE OF PERFORMANCE**



**FIGURE 2. PERFORMANCE IMPROVEMENT REDESIGN PROJECT**



Within the basic educational mission shared by most nonprofit institutions, this advice can be translated as follows: “Know your mission obligations and mission-consistent opportunities, narrow your focus to these, and in each, measurably outperform your obligations, goals, and peer norms.”

Treacy and Wiersema argue that the key to competitive differentiation and success is the discipline required to focus intensely on one of three possible priority “value disciplines” while also meeting threshold standards in the other two value disciplines in order to maintain overall competitive positioning within target markets. The three value disciplines are *product leadership* (think Princeton, MIT,

Apple), *operational excellence* (think University of Phoenix, UPS, Wal-Mart, Dell), and *customer intimacy* (think Williams College, the Mayo Clinic, a favorite clothing boutique or neighborhood restaurant).

Product leadership tends to focus more on cachet or innovation than on affordability, with pricing sometimes designed for the affluent and often justified by high-end design features, more expensive materials, service extras, or intangibles that exceed the broadly acceptable norms of functionality and satisfaction achievable at more competitive price points. Prestige is a good translation of product leadership into the higher education context. Prestigious private and public institutions typically practice product

leadership as their highest-priority value discipline, purposefully or not.

Operational excellence is the foundation for a reputation based on competitive pricing and customer satisfaction. Operational excellence is maintained by relentlessly improving productivity to maintain competitive pricing and by continuously improving quality to satisfy customers. In higher education, operational excellence is achieved by focusing relentlessly on per-student expense structures in the interest of maintaining the affordability of access (competitive net tuition pricing) while also ensuring that academic programs and other services are as flexibly accessible as possible, perform as promised, and earn satisfaction ratings in the three-star to four-star range from external stakeholders and supporters—students, parents, policymakers, donors, and grantors. The need for operational excellence to receive immediate attention from all nonprofit colleges and universities is echoed in the Spellings Commission’s recommendations: per-student operating expenses and learning productivity matter!

With the possible exception of the few institutions with endowments permitting a priority focus on prestige, most institutions should prioritize operational excellence first and customer intimacy second in their rankings of the three value disciplines. Yet many institutions currently prioritize customer intimacy (i.e., low student-to-instructor ratio) ahead of operational excellence. Ironically, most students will not judge a learning community to be intimate if it is not grounded in the integrated set of self-service (online) transactions and human interactions that are today’s basic enablers of operational excellence. Pre-Internet customer intimacy and post-Internet customer intimacy are quite different concepts. Customer intimacy in higher education today should be interpreted as a relentless focus on the individual student’s success, with learning success being first and foremost. “Learning intimacy” offers a learning and support-service experience that is flexibly responsive to the needs of the individual student and that provides engaging opportunities for inspirational, serendipitous, and timely interactions between students and their instructors.

The value discipline of customer/learning intimacy, including the quality of learning, continues to be measured (in inverse proportionality) by the student-to-instructor ratio. Owing to the high percentage of overall operational expenses consumed by the salaries and benefits of instructional personnel, the student-to-faculty ratio is also an excellent proxy measure for productivity and an inverse proxy for per-student expenses. Traditionally focused on decreasing the student-to-faculty ratio, academic logic may therefore conclude that customer/learning intimacy and operational excellence are opposing value disciplines. The Internet generation's cognitive styles and communication preferences provide the foundation for eliminating this false dichotomy. Institutions can focus on using the Internet to redesign their academic, administrative, and student service processes for both mission effectiveness and operational excellence (productivity) while also providing more flexible delivery options for their students. Willing institutions can focus on technology-enabled operational excellence as the most cost-effective "platform" for achieving customer/learning intimacy. The enrolled-student self-service portal becomes a primary medium for learning and service experiences that have been redesigned not only for efficiency and flexibility but also for effectiveness—for both operational excellence and customer/learning intimacy.

### Voluntary Counter-Reformation?

The immediacy, scale, effectiveness, and efficiency of the frictionless self-service transactions and human interactions enabled by the relatively new technologies of the Internet have changed the geopolitical and socioeconomic forces of the world. Competition is on the rise and is increasingly international in scope. Service organizations have never before had a comparable opportunity to expand their audiences and operate more cost-effectively and flexibly while maintaining or improving quality of service. Most have seized the opportunity by reforming from within to improve productivity and competitiveness. One exception in the United States is nonprofit higher education, for which the moment is not unlike one in the sixteenth century when a powerful, revered institu-

tion—the Catholic Church—faced escalating calls for reform. Aided and abetted by the new technology of the printing press, the Protestant Reformation realigned religious and political affairs across Europe and even spawned significant internal reform within the Catholic Church: the Counter-Reformation.

Long immune to the winds of change and long admired for its role in the American success story, U.S. higher education today faces an externally led reformation.

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Higher education policymakers are raising the bar on performance expectations for academe. The Spellings Commission and the political and policy leaders who regulate and help subsidize higher education understand the "flattening" role of technology and its use in increasing productivity, and they are accordingly sowing the seeds of reformation. They foresee a global deregulated, disaggregated, disintermediated lifelong learning market. They expect today's most venerable institutions to continue to serve traditional market niches, but they also are pressuring for innovative, affordable, and portable learning options designed to meet the global economy's voracious need for educational capacity and "higher" learning as the foundation of social and economic justice and the fair-play pursuit of happiness by all.

Shift happens! Let us hope that it happens voluntarily. Nonprofit higher education has an opportunity to demonstrate that its tradition of innovation, self-governance, and commitment to the common good can be channeled internally to measurably improve customer/learning intimacy, educational outcomes, operational excellence (productivity), and performance. And it must embrace the enabling role of technology in doing so. The time is right for a voluntary counter-reformation from within higher education, and some academic leaders are stepping up to the challenge. *e*

### Notes

1. William H. Graves, "Improving Institutional Performance through IT-Enabled Innovation," *EDUCAUSE Review*, vol. 40, no. 6 (November/December 2005): 79–98, <<http://www.educause.edu/er/erm05/erm0564.asp>>. This earlier paper kicked off a discussion of the external pressures that are driving U.S. higher education to account for and measurably improve institutional performance. See also Kenneth C. Green, "Bring Data: A New Role for Information Technology after the Spellings Commission," *EDUCAUSE Review*, vol. 41, no. 6 (November/December 2006): 31–46, <<http://www.educause.edu/er/erm06/erm0661.asp>>, and Rob Abel, "Innovation, Adoption, and Learning Impact: Creating the Future of IT," *EDUCAUSE Review*, vol. 42, no. 2 (March/April 2007): 13–30, <<http://www.educause.edu/er/erm07/erm0720.asp>>.
2. U.S. Department of Education, *A Test of Leadership: Charting the Future of U.S. Higher Education*, a Report of the Commission Appointed by Secretary of Education Margaret Spellings (Washington, D.C., 2006), final report, September 2006, <<http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf>>.
3. CHEA has formed and is engaging with the CHEA Tenth Anniversary Commission, which, according to a private letter of invitation to participate in the commission, is "a distinguished group of leaders from higher education, accreditation and the public appointed by the CHEA Board of Directors to reflect on the current and future role of accreditation in serving students and society."
4. Peter McPherson and David Shulenburg (NASULGC), "Toward a Public Universities and Colleges Voluntary System of Accountability for Undergraduate Education," discussion draft, August 31, 2006 <[http://www.nasulgc.org/vsa-8-31-06%20\\_7\\_%20\\_2\\_.pdf](http://www.nasulgc.org/vsa-8-31-06%20_7_%20_2_.pdf)>.
5. Thomas L. Friedman, *The World Is Flat: A Brief History of the Twenty-First Century*, 1st updated and expanded ed. (New York: Farrar, Straus and Giroux, 2006), p. 177.
6. *Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce* (Washington, D.C.: National Center on Education and the Economy, 2007), <[http://www.skillscommission.org/pdf/exec\\_sum/ToughChoices\\_EXECSUM.pdf](http://www.skillscommission.org/pdf/exec_sum/ToughChoices_EXECSUM.pdf)>, p. 5.
7. Both of these strategies are discussed in more detail in Graves, "Improving Institutional Performance through IT-Enabled Innovation."
8. See Carol A. Twigg, "Improving Learning and Reducing Costs: New Models for Online Learning," *EDUCAUSE Review*, vol. 38, no. 5 (September/October 2003): 28–38, <<http://www.educause.edu/ir/library/pdf/erm0352.pdf>>. Applied systemically, the common course redesign strategy can reduce annual institutional operational costs by 8–10 percent (Graves, "Improving Institutional Performance through IT-Enabled Innovation").
9. For materials that can help seed a performance dialogue and assess institutional readiness to support a systemic, voluntary effort to achieve measurable performance improvement, see the Appendix in the online, html version of this article: <<http://www.educause.edu/er/ERM07/ERM0741.asp>>.
10. Michael Treacy and Fred Wiersema, *The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market*, expanded ed. (Reading, Mass.: Addison-Wesley, 1997).