

American Higher Education

1. How will information technology affect the future of higher education?

Barry Munitz, President and Chief Executive Officer, J. Paul Getty Trust: Information technology will profoundly influence both the content and the delivery system for traditional colleges and universities. The challenge to translate the content—that mountain of data arriving so rapidly—into accurate and useful information and then into knowledge and wisdom will test everyone's talent and energy. We will also have to rethink the delivery system—the way in which we teach and people learn—and reexamine the balance between classroom instruction and distance learning.

David Ward, Chancellor and Andrew H. Clark Professor of Geography, University of Wisconsin–Madison: Information technology will present the possibility of greater “customization” of courses and programs, combined with enhanced flexibility of delivery. The communication of research is likely to be more varied, with formal publication playing a less significant role while the current improvements in access to research findings and library collections are likely to accelerate.

Molly Broad, President, University of North Carolina: The tremendous pace of technological change has made it imperative that individuals continuously upgrade their knowledge and skills. To stay competitive, one has to stay current. As a result, lifelong learning will be the dominant paradigm for higher education in the twenty-first century. Information technology is driving an increasing emphasis on establishing and maintaining effective learning relationships with students throughout their lives. It is also likely to be the primary vehicle by which we accomplish those goals.

Ellen-Earle Chaffee, President, Mayville State and Valley City State Universities: The focus of higher learning will shift from institutions to individuals, a change as fundamental as the seventeenth-century legitimization of the scientific method and the nineteenth-century enactment of the Morrill Act and applied learning. The “knowledge age” requires constant, individualized learning, and information technologies support such learning. Learning resources for all ages, stages, learning styles, learner locations, and schedules will allow learning to become intrinsic to living. The question is how higher education institutions will adapt.

Clark Kerr, President Emeritus, University of California: Basically information technology will be an add-on, not a replacement.

Graham B. Spanier, President, Pennsylvania State University: In the past ten years, information technology has moved from being primarily a research tool to being a central part of the institutional fabric. The Web now touches all of the critical processes of teaching, research, and administration, and I can't imagine higher education without such technology. As video, audio, and data transmission converge and become more universally available, technology will have far-reaching implications for the way we learn.

2. Are for-profit educational institutions a threat to higher education as we know it?

Munitz: If the implication is that suddenly the new proprietary and profit-seeking institutions will replace our traditional colleges and universities, absolutely not. If the question really asks whether or not our traditional academic institutions will have to adjust dramatically to the challenges posed by these newer entities, and whether for the first time there will be genuine profit-side competition for what our colleges and universities do and how they do it, then absolutely yes.

Ward: Since higher education comprises so many different niches in its relationships to students and to other more direct kinds of knowledge transfer, the threat, challenge, or opportunity of competition will vary greatly. Most for-profits are currently serving a new clientele or one different from that served by major residential universities, but the increased customization of their mode of delivery will greatly influence how we teach and learn.

Broad: Before we can identify for-profit institutions as a threat to “higher education as we know it,” we have to define that phrase. What is higher education as we know it? Trade schools? Community colleges? Liberal arts institutions? Research universities? If we view the emerging for-profit institutions in the context of the tremendous diversity in American higher education, we see that one's perspective on their potential impact depends on the market niche, academic mission, and student population in question.

Chaffee: Any institution, existing or new, that offers quality, convenience, and relevance presents a serious challenge to

those that do not. For-profit institutions that sell convenience over quality will not last long. Others will succeed, perhaps at the expense of a few traditional institutions, and will constitute a well-recognized type, alongside public and private. If your institution believes that “market-driven” cannot include “quality” by definition, I would love to count you among my competitors.

Kerr: For-profit institutions are a new source of competition and will be a “threat” only if higher education does not respond aggressively.

Spanier: No. But for-profit educational institutions will provide a healthy challenge to traditional higher education, especially in the areas of distance and continuing education and in popular fields such as business administration. The course offerings coming from the for-profit sector are less likely to be offered with full-time faculty and library support, making it difficult for traditional institutions to be financially competitive. But I am confident that we will, in the end, be competitive.

3. Can higher education afford to continue to operate in its current form?

Munitz: Affordability literally concerns whether the resources will be available at our colleges and universities and whether students will be able to pay for them. Affordability metaphorically implies whether traditional institutions will be able to survive and prosper without fundamental restructuring. Most quality colleges and universities will likely continue to thrive, but many others either will completely restructure or will disappear. Even those that remain at the top will look and work quite differently in the near future.

Ward: Just as our current form was created in response to changes at the turn of the nineteenth century, we are now adapting to equally demanding changes at the end of the present century. The real issue is whether our adaptations are adequate and responsive.

Broad: The ever-increasing interconnectedness we are experiencing has profound implications for all educational institutions. It is already redefining the teaching and learning process throughout the educational spectrum. It is also redefining how institutions interact with their students as well as what students expect of those interactions. Given

the diverse range of higher education institutions, some will be affected by these changes more than others, but information technology will leave its mark on them all.

Chaffee: No. Elite universities, community colleges, and institutions in states with more demand from young people than campuses can accommodate are more protected than the rest. Others must dramatically improve services, cut costs, and increase revenues. Distance delivery may satisfy some of the burgeoning market for lifelong and workforce learning but will not adequately meet the needs of younger students. Convenient instruction with adequate face-to-face interaction will be the best option for learning. The clamor over distance learning must not eclipse the search for models of affordable, technology-enriched on-campus instruction.

Kerr: Mostly “yes.”

Spanier: Universities must continue to push quality, effectiveness, and efficiency. We will need to be responsive to market demands of our resident students, but also increasingly to those who need continuing and distance education. Technology will be a fundamental part of this future.

4. How can the burgeoning global demand for higher education best be addressed?

Munitz: With the same miraculous variety of type and quality that has driven American higher education for the past several hundred years. We will require dramatic choice between institutions that are very different but equally effective in their own chosen area of responsibility. Obviously, advances in electronic communication will profoundly alter how we reach outlying areas in all countries, and with national boundaries breaking down in every social function, nationalistic or chauvinistic protection will give way to global networks.

Ward: Higher education is likely to become more differentiated by mission and clientele over the next decade, and the ability of individual institutions to partner with both similar and different institutions in this emerging array of educational providers will determine our global engagements.

Broad: There is no single answer. We have to think in terms of multiple paths to help students achieve a variety of higher education goals. The emergence of new providers,

both public and private, may provide one avenue. The advent of technology-mediated learning is probably another. In both cases, established higher education institutions will have to work with each other and with for-profit institutions to develop a framework for ensuring educational quality, wherever and however learning opportunities are delivered.

Chaffee: Develop mechanisms that allow the closest approximation to a free market for learning, supplemented by programs to reach the disadvantaged. For a free market that would effectively match needs with appropriate providers, we must have understandable, published indicators of quality, content, and value. International distance delivery must not become “the answer.” Partnerships between established, quality institutions and emerging institutions in underdeveloped countries should be supported.

Kerr: By increasing the capacity to offer service.

Spanier: I believe that programs like Penn State’s “World Campus,” which will operate on a self-support basis, represent the most promising approach to global demand for educational programs. We had nearly 1,000 enrollments in our first year of operation. We are already enrolling students from many foreign countries. And while there will likely be a growing number of providers, many will fail. At the same time, I anticipate more partnerships.

5. What is the biggest threat that higher education is facing?

Munitz: With boundaries breaking down and with educational consumers beginning to challenge traditional academic institutions in the same way that they confronted U.S. automobile manufacturers and the health-care organizations, the biggest concern is the willingness and the pace of our most prestigious institutions as they react to the

changes. The threat is that other institutions will emerge to meet the public’s expectations, but I believe—without hesitation—that our strongest colleges will demonstrate the skill, the strength, and the courage to adjust.

Ward: We face two major threats: the inability to recognize where in the new emerging array of providers any given type of institution fits, and the lack of experimental initiatives to cope with the uncertainty of future conditions.

Broad: Not maintaining a strategic perspective broad enough to encompass the constantly shifting context. Our attention can easily be captured by day-to-day issues, leaving us unable to anticipate the next wave of change just over the horizon. Higher education institutions must view themselves within a rapidly evolving global context in which technology continuously redefines the rules. However, our historic commitment to broad, open dialogue, both within and between institutions, provides us with a unique capacity to address this challenge successfully.

Chaffee: The enemy is us. We lack the systems flexibility, the financial resources, the market-driven orientation, and the will to address current conditions quickly. Traditional institutions tend to be preoccupied by demands for growth, extremely scarce resources, or their own prestige. Many define *quality* by inputs and processes more often than results, so they discredit legitimate innovation and underestimate its potential. Polemics substitute for debate. Opportunities for win-win collaborations between institutions go unnoticed. Our incentive systems are upside-down.

Kerr: The lack of adequate resources.

Spanier: The biggest threat is complacency—the sense that the global changes that affect most other institutions won’t greatly affect higher education. Complacency will lull faculty and administrators into overlooking new opportunities to accomplish their missions.