They Never Saw It Coming

RECENTLY, A HIGHLY REGARDED NEWSPAPER PUBLISHER, PERHAPS THINKING OF DINOSAURS WHILE speaking of his own profession, remarked to me that “We are all dead; some of us just don’t realize it yet.” He is of course not alone in his lament: Remember videocassette recorders, carbon paper, and mechanical typewriters? Various writers have warned that it is not the strongest of the species that survives, or the most intelligent, but rather the one most adaptable to change.

Which brings us to what may be America’s greatest asset after its democracy and free enterprise system—and also the most resistant to change: its higher education system. Indeed, with the exception of religious institutions, it is difficult to think of any more intransigent entity. The canonical student, professor, book, blackboard, and piece of chalk have survived for centuries as the ingredients of pedagogy throughout the world.

But then came the technological revolution, accompanied by declining U.S. financial support for higher education and the advent of globalization. Given those pressures, one could postulate that, for example, the university of the future will have no library because students will carry it in their pockets; and that there will be no classes, as adaptive, interactive, computer-taught sessions will have taken their place. Lectures will be provided, courtesy of distance learning, by a few world-class professors located around the globe. Biometric identity verification will permit examinations to be held far away from any campus, with instant grading accomplished by teaching-assistant computers. Universities will operate 12 months a year. Departments will cease to exist and tenure will disappear, the victim of mounting financial pressures. The great state universities, responding to continually reduced government funding, will become quasi-private institutions, with most unfortunately lacking adequate endowments. For-profit firms will be created to conduct examinations based on course material placed online without charge by the world’s most renowned universities and will award certificates of completion. Players in intercollegiate athletics will be unionized and highly paid, as are their coaches today, and perform before small crowds that serve as studio audiences for multimedia productions. And many more individuals will be able to afford what passes for a college education.

Awful? Perhaps. Possible? Probably. The lack of face-to-face interactions among students and faculty will certainly diminish the educational experience. But with tuition now ranging from $10,000 to $50,000 per year, all but the wealthiest of parents and students may get used to the idea. Most damaging will be the further bifurcation between the wealthy and the poor, with children in the former group attending the best campus-based institutions that manage to survive and the others relegated to a computer screen. Even today, the best predictor of the extent of a child’s education is its parents’ educational level (and, implicitly, wealth).

Technology is good, but it is important to control it so as to benefit and not harm higher education. This will require that national leaders recognize the enormous return from investments in research. It will also require state leaders to embrace the huge payoff realizable from supporting higher education. And it will require university leaders to better control the cost of education. Also urgently needed is a rethinking of such matters as the balance of emphasis on research and teaching in our great universities; the balance of academics and intercollegiate athletics; the sustainability of universities serving as a backstop for a failing precollege education system; the efficacy of U.S. immigration policies, particularly as they affect students; and the impact of the 15-hour study-weeks revealed by recent surveys of university students.*

When I became the chief executive officer of a large aerospace company, the Berlin Wall had just collapsed. Had I been told that within 6 years 40% of all the people in the industry and three-fourths of its companies would be gone, I would have said, “Not possible.” It happened.

— Norman R. Augustine

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*National Survey of Student Engagement Annual Results 2012 (http://nsse.iub.edu/html/annual_results.cfm).

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