Educational Pathways — Covering Higher Education Distance Learning and Teaching

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FUTURE WATCH: THE FUTURE OF HIGHER EDUCATION ACCORDING TO A FUTURIST

Who better to start a conversation with about the future than a man whose website is **www.the-futurist.com**? That man is David Snyder, lifestyles editor of *The Futurist* magazine and principal partner of The Snyder Family Enterprise, a 30-member virtual consultancy that scans the print media for worldwide trends.

Our conversation started with a very broad question: "What's your vision of the future of higher education, especially as it pertains to online teaching and learning?" Snyder began with the following statement: "Information technology will have a greater, more transmogrifying effect on higher education than on any other industry or profession; so much so that I have a hard time speculating on how it might all end up."

We then went down a meandering pathway that touched on such topics as the information revolution, the workforce of the future, the dismantling of higher education, and much more.

"The Day After Tomorrow"
Deeper into our conversation Snyder had a message that came across loud and clear. "Higher education," he says, "will have to make its principal delivery mode electronic, and it is going to have to do it in five years, not longer." He has reached this conclusion as a futurist who conducts deep research into where we are heading as a global society. He notes that an "info-mation revolution" is "surging up around post-secondary education like the Atlantic Ocean engulfed New York City in the movie 'The Day After Tomorrow.' It is going to well up around them; today's computer-equipped, cyber-savvy students will inundate the foot-dragging post-secondary administrators and faculty who want to preserve the ancient, noble institution of the university largely as it is. . . Hey, everybody: Wake up! This is a revolution."

The Next Job Market
In short, Snyder believes that the leaders of higher education are not rising to the challenge of changing their curriculum content and delivery to be more in step with the workforce of tomorrow. The big question on everybody's minds is what skills, precisely, might that workforce need? The hard-to-discover answer can perhaps be found in the research coming out of higher education.

For example, Snyder points to the work of MIT Economics Professor Frank Levy and Harvard Education and Society Professor Richard J. Murnane (among others), in their April 2004 book titled "The New Division of Labor: How Computers are Creating the Next Job Market." Levy and Murnane assert that computers are not eliminating jobs; instead, computers are shifting jobs. "They [Levy and Murnane] have identified two classes of skill groups that are rising in demand and salary: non-routine cognitive analytic skills and non-routine cognitive interactive skills," Snyder says.

In a Q & A column with Levy and Murnane, published in the June 2004 issue of the *Harvard Graduate School of Education News* (**http:/gseweb. harvard.edu/news/ features/murnane06012004.html**), one can easily discern the short answer to the question of what skills are needed by tomorrow's workforce. They are "expert thinking," meaning "the ability to solve new problems that cannot be solved by rules," and "complex communication," meaning "the ability not only to transmit information, but to convey a particular interpretation of information to others in jobs like teaching, selling, and negotiation."

Sensing the Real World
Snyder says that, in order to more effectively produce expert thinkers and complex communicators, higher education needs to put educational technology to better use, as well as make the administrative/organizational side of its enterprise much more supportive of its farseeing educational technologists. He adds that while there are many faculty and administrators who have adopted innovative technologies and are, indeed, catalyzing the teaching and development of critical thinking and communication skills, there are just as many educators, if not more, who still "don't have a sense of the real world."

To Be or Not to Be Market Driven
One way of having a keener sense of the real world is to be market driven, meaning that higher education has to become better at allowing the marketplace, especially business, to guide its innovations. This kind of marketplace collaboration is currently happening more effectively at for profit institutions as opposed to traditional public and private higher education institutions.

Adopting Groupware
Another way of developing a keener sense of the real world is to recognize that our new generation of learners are obviously Internet savvy and, in particular, attuned to using "groupware" as a means of communicating, collaborating, and learning. Groupware, in this context, refers to applications that enable people to share knowledge and collaborate on relevant educational projects both asynchronously and synchronously. Tools that fall under this category include instant messaging, peer-to-peer filing-sharing systems, weblogs, and wikis. "It is clear that we now have the tools," says Snyder. "It is also clear that scholarly literature is bubbling with exciting examples of faculty who have made striking applications of groupware as an instructional tool with wonderful successes." However, Snyder asserts that higher

education, in general, is moving much too slowly in its adoption of innovative educational technologies and, in most cases, is "adopting distant learning arrangements that are a generation old and calling them cutting edge."

Keeping Pace with the Private Sector?

Meanwhile, in the business world, cutting-edge learning technologies are making rapid progress, notably in the entertainment and media industries, says Snyder, adding that in four or five years we will see an accelerating proliferation of highly sophisticated instructional games coming from the private sector. Such innovative educational technologies will have strong appeal for the prospective student mass markets of the near future.

The Dismantling of Universities

Snyder sees higher education's relatively slow adoption rate of online instruction and inter-active learning as a harbinger of a dismantling process. He believes that if educational technology adoption rates do not speed up significantly, within five years higher education will begin to be "eaten alive by entrepreneurs," who will create more innovative and exciting teaching and learning environments, made possible by new technologies and driven by the market's desires. And because these superior learning experiences will be offered at less cost, as higher education tuition rates continue to rise, marketplace competition will lead to a "dismantling of most universities." He adds that this dismantling process will not occur at community colleges, which will remain the bastion for retraining a workforce that will continue to lose jobs that are being info-mated and off-shored. Four-year undergraduate, graduate and doctoral programs, however, will be altered far beyond our current recognition.

"I can see most large universities being dismantled just like the dis-establishment of the monasteries during the Protestant Reformation in Europe," Snyder speculates. "Their property will be split up. Some of it will go to communities to do local things, and some of it will be turned into trade schools or professional institutes and training centers. Meanwhile, the scholarly functions of our ivy-covered ivory towers will be turned into R & D centers, similar to big think tanks such as the Rand Corporation and the Battelle Institute."

Grade point averages and that piece of paper that says you have a degree will become less meaningful, because both are such poor predictors of how well an individual will do once they enter the workforce. With the Internet driving the empowerment of individuals to more readily and more cost effectively obtain new knowledge and skills outside of the slow-to-adopt higher education system, businesses will increasingly use tests to determine their job candidates' competencies. In other words, business will rely on well-developed aptitude and attitude tests that "give them a far better ability to accurately forecast the potential of a recruit than do academic credentials", Snyder continues, adding that reliance on recruitment screening tests is rapidly spreading throughout the corporate world on both sides of the Atlantic.

Webloging to a PhD

Snyder also envisions a new way for people to earn doctorates. Individuals would no longer defend a dissertation before a panel of five scholars. Instead, the doctoral candidate would post his or her dissertation on a weblog and defend it "against all comers for six months," Snyder enthuses. A university-endorsed panel of "fair witnesses" would review and critique the weblog and ultimately certify whether or not a doctoral candidate had adequately defended or amended his or her proposition. Successful candidates might also be required to post and defend an updated version of their work every five years to keep their doctorate current. Taking this idea one step further, Snyder envisions new individualized PhDs being awarded in this manner to people working in esoteric fields where degree programs may not yet have been created, such as chaos economics, proteomics, or genetic analogy. These candidates could be awarded PhDs through the weblog process without ever enrolling in – and without having to pay the increasing cost of – the traditional formal higher-education system. This would allow people who have become experts/masters in their fields through a wide variety of personal, self-directed, experiences – garnered partially or entirely outside of the formal higher education system – to earn valid PhDs.

The Final Analysis

So, what does all this really mean for the overall future of higher education? Snyder says there will be a stronger integration of education and employment at the community college level, where people will be continuously trained for the small and medium-sized businesses in their local areas. The four-year universities and colleges will spin off their professional programs into free-standing career schools – law, medicine, engineering, management, fine arts, etc. These career colleges would also be more closely aligned with employers. University research and scholarship will be separated from all this. "The universities will get back to what Oxford, Uppsala and La Sorbonne once were - where we freely explore the frontiers of all knowledge, discover previously unknown realities, and achieve new understandings of our circumstances and the human agenda."

"As reconstituted and re-purposed," Snyder concludes, "the post-industrial university would continue to merit public funding and tax-exempt contributions, although on a smaller scale than that required before they divested themselves of their professional-technical career colleges, which will have to compete, prosper or fail in the changing marketplace based on their own merits."

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