The Virtual Classroom Vs. The Real One

(Published in http://www.forbes.com edition 09.11.00)

INVESTORS ARE POURING MILLIONS, soon to be billions, into the online education market. Conservative figures from analysts at Thomas Weisel Partners, a merchant bank in San Francisco, estimate a $10 billion virtual higher-ed market by 2003 and an $11 billion corporate-learning market by the same year.

That's $21 billion from almost nothing and it's the kind of market that makes venturesome investors drool. John Chambers, the highly esteemed CEO of Cisco Systems, calls online education the "killer app" of the Internet. Here are some of the big players in Web education. Michael Milken, his brother Lowell and Oracle's Larry Ellison run Knowledge Universe, a venture hatchery for educational and training companies.

Washington Post Co. is knee-deep in edu-ventures including KaplanCollege.com, which offers 500 online courses across nine professions.

Wall Street magnate Herbert Allen of Allen & Co. has earmarked $20 million to launch and sustain Global Education Network (GEN), a clearinghouse of courses from America's top colleges: Brown, Wellesley and Williams among them. The site, poised to be the first elite education provider online, will be tested this fall.

Meanwhile, at least in higher education, the Establishment is moving quickly to embrace the Internet. In December 1999, the National Center for Education Statistics (NCES) of the U.S. Department of Education (USDE) released a new national survey on what it calls "distance learning" in higher education. In 1997-98, almost 44% of all higher education institutions offered distance courses. Larger institutions are moving fastest: 87% of those with more than 10,000 students offered distance classes, while only 19% of institutions with fewer than 3,000 students did so.

Total enrollment in postsecondary, credit-granting distance learning courses in 1997-98 was 1,363,670; the number has grown considerably since, although as yet there are no firm figures.

Significantly, almost all the growth was in courses that used the Internet, rather than TV, to bridge the distances.

This is no fad. It is rather a stampede and nothing can stop it. Online education is convenient (no moving, no commuting, no leaving the house even) and collaborative (students in China and Minnesota can work together on presentations). Teaching institutions can reach many more students without having to expand their physical plants. With its vast bag of technological tricks, the Web can offer a multimedia approach potentially equal to the very best-equipped classrooms in the world.

Globally those conveniences have even greater impact, particularly in Asia, Africa and Latin America, where more than two-thirds of citizens are under 20 years old. Without training these kids cannot become assets in a modern economy. But where are these developing countries to get the necessary money using conventional classroom education?

Though Web education is in its infancy, listen to professor Roger Schank, a computer scientist at Northwestern University who runs an online learning outfit called Cognitivearts.com. "We are witnessing the dawn of a new era in education. In the beginning it will look a lot like what it is replacing, just as early movies were simply filmed plays. "But like the movies, online education will evolve into something very different from what now exists. We are at the beginning of something very exciting." For every student who gets into Harvard, a hundred more could handle the work. Why should they be denied?

"We are undertaking a social experiment on the grandest scale," says Doug Levin, a senior research analyst at the American Institute for Research. Levin has been researching technology for the Department of Education since 1995. "There is every reason to believe that it [online education] is something we should be doing … but you have to recognize that we are inventing this as we go."

Prof. Schank says, "new online courses will be so exciting students will demand them." Maybe in the future, but for now it is generally agreed that attrition rates from online schools are higher than from traditional schools. Vicky Phillips, founder of Geteducated.com, a consulting agency for distance educators, estimates the online student dropout rate at around 35%. The average attrition rate for college freshman at U.S. universities is around 20%, Phillips says. The fact is, much of what passes for online education today would put most of us to sleep.

New techniques are being developed and right now every e-learning company and university has a different idea about how to use the Internet.

Western Governors University (www.wgu.edu/wgu), for example, assigns students "mentors" who act as guides through the school's academic programs; e-mail and telephone connect student to mentor and student to student. Courses are downloaded through RealPlayer, PDF file, and a vast library database designed by the university.

By contrast, students in the University of Illinois Curriculum, Technology and Education Reform master's program (www.ed.uiuc.edu/ed-online/cter) receive assignments from a slate of professors, track those assignments through a university-generated database, and hold asynchronous threaded discussions--they don't have to be online at the same time--and real-time chats through WebBoard 2.0. Even with high-tech tools, the conversion of curriculum from classroom to Internet is not easy or intuitive. "It is vastly harder than preparing a classroom course, 20 times the effort," says Eli Noam, professor of economics and finance at Columbia Business School.

One of the reasons it is harder is that online students face more distractions than do students in a classroom. "You have to script it very carefully." He knows he's competing with wine, crying children and prime-time TV. His lecture materials are accompanied by 150 slides, a recorded soundtrack, video and photos of himself in lecture poses. Noam has even played with the idea of planting online ringers to spur discussions and debate.

"People tend to lose interest if there's nobody on the other side who cares if I'm here or not," remarks Geteducated.com's Phillips. "That's where we're getting dropouts."

GEN's backer, Wall Street magnate Herb Allen is aware of the difficulties. For the newcomers to compete with established educational institutions on the Web, private capital must bring needed innovation to the educational process. "The question we will continue to ask is: Can we [GEN] make it better than sitting in English 101 at Williams?" If not? "If we don't get the quality we want, we'll shut it down."

Thomas Kalinske is CEO of Knowledge Universe, the Milken/Ellison-financed agglomeration of more than 40 e-learning companies. Kalinske claims his people have figured out how to make online learning more "enjoyable and exciting" than it was a few years ago when hyperlinking lecture notes seemed like an innovative idea.

Kalinske points to Unext, a Knowledge Universe holding: "The knowledge transfer is done in such a way that they know that the individual

is grasping it. Students are constantly being assessed. That's why we're so confident." For example, Unext's technology can detect if one student is learning faster through formulas and one through video presentations. It then tailors the coursework to each student.

The one segment of the online education market that seems to be moving the most confidently is corporate training programs. Most big companies are sold on the idea that continuous training and retraining of employees pays off big. For the average company, use of e-learning is 50% to 90% cheaper than bringing in real-life teachers and holding formal classes.

Keith Gay, the Thomas Weisel security analyst, says corporate learning companies are starting to attract big dollars. He points to two e-learning companies he thinks have great potential: SmartForce and DigitalThink. Both create software that companies can use to establish online training coursework. At the end of 1999, SmartForce signed a $25 million deal with Unisys. Earlier this year, DigitalThink, whose clients include Cisco Systems, Charles Schwab and Deutsche Bank, recently inked a deal with EDS for $50 million.

Before this is over, big money is going to be lost and maybe some will be made, but education will never be its old rigid and formalized self. No longer will a handful of admissions officers in their self-righteous wisdom be the sole guardians of the gates to the best in education. For every student who gets into a Harvard or a Princeton or a Berkeley there are probably a hundred who could handle the work. Why should they be denied the opportunity?

We'll let the articulate Professor Schank have almost the last word: "Students will be able to shop around, taking a course from any institution that offers a good one. Degree-granting institutions will have to accommodate this. "They will resist at first, but eventually society will realize that anyone is entitled to the best courses, and barriers will fall. Quality education will be available to all. Students will learn what they want to learn rather than what some faculty committee decided was the best political compromise.

"Education will be measured by what you know rather than by whose name appears on your diploma." If the Internet can facilitate this kind of change, we can only say, Amen.