

E A R N A

M A S T E R S ,

V I R T U A L L Y

**Technology and a ready market are causing cyber graduate schools to take off.**

**G**raduate schools. Ivy-espaliere towers of learning. Dark library walls graced with portraits of bespectacled academic deans. These picturesque concepts of the Ivy League are quietly being challenged by a new vision of the university for the 21st century: the cyber league.

While brick and ivy graduate schools will not disappear, their reach is being extended through the growth of electronic universities. Today, videoconferencing allows faculties to be seen and heard across campus and across continents. Passionately silent classroom discussions on topics from

network security to the poetry of T.S. Eliot take place via mailing lists. Managers from Bombay to London meet with geographically far-flung colleagues in e-conferencing halls to tackle the best ways to motivate their workgroups. The pioneering faculty and students of the cyber league are fervently at work, creating the first keyboard accessible graduate schools for advanced learning.

Distance learning, as the field is termed today, is not new. University "home study" programs existed long before the first PC rolled off the assembly line. Distance learning enjoys a rich heritage, beginning when the printing press met the pony express. The University of Wisconsin,

one of the oldest and largest distance-delivery programs in the United States, offered its first correspondence course via coach and pony mail in 1891. Today, the university's department of continuing and vocational education offers an Internet-assisted professional certificate in distance education at <http://www.uwex.edu/disted/certpro.html>.

Wisconsin's program introduces adult educators to the burgeoning world of electronic teaching and learning. Registrants

# Distance Learning Programs

**Canadian Distance Education Directory**  
<http://is.dal.ca/jmerry/dist.htm>

**Coast Telecourses**  
<http://ct.ccc.cccd.edu>

**Columbia Southern University**  
<http://www.colsouth.edu>

**Comprehensive Distance Education List of Resources**  
<http://www.dacc.cc.il.us/~ramage/disted.html>

**Distance Education Clearinghouse**  
<http://www.uwex.edu/disted/home.html>

**Distance Education and Information Technology**  
<http://info.aes.purdue.edu/acs/disted.html>

**Dr. E's Eclectic Compendium of Electronic Resources for Adult/Distance Education**  
<http://www.lib.umich.edu/chouse/inter/30.html>

**Georgia Tech**  
<http://www.conted.gatech.edu>

**Global Distance Learning Channel**  
<http://www.euronet.nl/users/chrisson/>

**Indiana University Division of Extended Studies**  
<http://www.extend.indiana.edu>

**International Centre for Distance Learning**  
<http://acacia.open.ac.uk>

**Keystone National High School**  
<http://keystone.ptd.net>

**Lifelong Learning Home Page; Adult Education & Distance Learner's Resource Center**  
<http://www.together.net/~lifelong>  
[lifeflearn@aol.com](mailto:lifeflearn@aol.com)

**Open University**  
<http://www.open.ac.uk>

**Rhodes International**  
<http://www.pavilion.co.uk/rhodes/>

**Southern California University for Professional Studies**  
<http://www.scups.edu>

**SUNY Empire State College**  
<http://www.esc.edu>

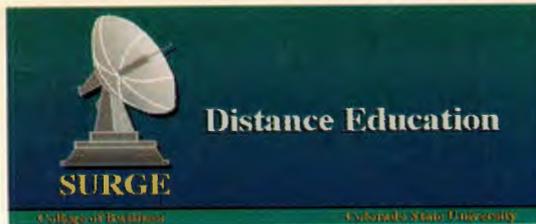
**TEAMS Distance Learning**  
<http://teams.lacoe.edu>

**United States Distance Learning Association**  
<http://www.usdla.org>

**University of Berkley**  
<http://www.uofb.com>

**University of Maryland Institute for Distance Education**  
<http://www.umuc.edu/ide/ide.html>

**World Lecture Hall**  
<http://www.utexas.edu/world/lecture/>



study everything from designing interactive audio seminars to facilitating computer-mediated conferences. The entire program may be completed from one's keyboard, with optional summer attendance at the Madison campus for those who crave hands-on learning in the university's teaching technology labs.

In the 1980s, cable technology coupled with the proliferation of the VCR breathed new life into home study. Cable and video technology allowed colleges to enhance correspondence programs with live lectures broadcast to specially equipped remote class sites. Graduate schools quickly began recording lectures and mailing videocassettes to remote learners for passive viewing at a later date. For the first time, anyone with an honors grade-point average and a VCR could attend a top-notch business school from their easy chair.



Colorado State University's Graduate School of Business <http://cobweb.cobus.colostate.edu/html/disted/surge.ndk> has offered a campus-free MBA program for two decades. In the last two years, the program has moved from being primarily video-based to integrating interactive Web technology and video-conferencing. According to Jamie Switzer, Colorado's director of distance education and media, e-conferencing and mailing lists actively involve remote learners in classroom discussions and encourage collaborative learning projects. All course materials, such as syllabi and handouts, are available from the program's Web site.

Despite its unorthodox method of delivery, the Colorado MBA offers a traditional and demanding curriculum, which has been modified, according to Switzer, only to give the program a more "real-world practical application slant." Entry into the program is competitive, with independent raters ranking the Colorado MBA program among the top 25 percent in the country, whether one attends on-campus or through the Net.

Richard Vigilante ([vigilant@is2.nyu.edu](mailto:vigilant@is2.nyu.edu)), Director of the Virtual College at New York

University's School of Continuing Education (<http://www.nyu.edu>), feels that in today's electronically networked society it makes no sense for adults to be bound by time and place when it comes to learning essential new skills.

According to Vigilante, demographics demand a just-in-time approach to higher education. "With 85 percent of part-time students in the United States being 25 years and over, and with increasing demands imposed on them for their professional and personal time, online education is a viable instructional alternative."

As corporations search for new ways to train workers, Vigilante sees organizational hierarchies and bureaucracies giving way to geographically dispersed workers "collaborating in virtual workplaces created by networked computers." New York University's Virtual College allows business executives from Tokyo to New York to learn about network and database technologies by using them in a richly endowed online environment.

NYU's Virtual College, launched in the spring of 1992, turns the once-futuristic notion of a desktop university into a reality. The virtual college's advanced professional certificate in information technology (worth 16 credits) is available online (an ISDN or faster connection is required). Students must apply to the program in the traditional manner by filling out a paper application.

On acceptance, students receive a booklet explaining how to configure their PCs or local-area networks. The course, which had 75 students last year, is in its final year. Unlike many distance-learning programs that rely on old-fashioned print-based correspondence courses with e-mail lesson options as add-ons, NYU's virtual college operates from a digital platform.

A Lotus Notes database system forms the communications backbone. Instruction methods include video on demand, collaborative online laboratories, and hypertext libraries and learning modules. Even the textbooks and final exams are stored and accessed online. Class discussions are held asynchronously, with learners reading and posting class



commentary whenever they are online. When learners or faculty want to lean back and relax, the Virtual Café database serves as an informal chat station.

Next year, NYU will offer a master's of science degree in management online and will market it nationally.

Among the first to reserve seats in the new electronic lecture halls were school teachers seeking to understand how to harness technology in their classrooms. With computer technology infiltrating school curricula at breakneck speed, many teachers and administrators are struggling to keep current.



The International Society for Technology in Education (<http://isteonline.uoregon.edu>) is a nonprofit agency working through Portland State University and the University of Oregon to offer residency-free, Internet-assisted graduate courses in topics such as Planning for Technology in Education for the K-12 teaching professional.

George Washington University, which houses one of the oldest graduate schools of education in the country, offers a residency-free master of arts degree in education and human development with a concentration in educational technology and leadership through combined electronic and video platforms (<http://gwis.circ.gwu.edu/~etf/>).

The program, now in its fifth year, specializes in educating school media and technology consultants. The Graduate Instructional Performance Technology department at Boise State University ([http://www-cot.idbsu.edu/~ipt/ipt\\_g.htm](http://www-cot.idbsu.edu/~ipt/ipt_g.htm)) teaches professionals how to design and implement computer-based curriculum for adult learners. A master's in instructional and performance technology is available via e-conferencing to any properly configured learner worldwide. Unless a thesis is opted for, Boise State faculty and learners "meet" only in their electronic forums—through slow-scan video, the telephone, and the viewing of videotaped workplace projects.

The Internet is changing not only teaching methods, but what is being

taught. The New School for Social Research in New York City offers an MA in media studies and technology that immerses learners in the tangled question of what electronic media will mean in an increasingly knowledge-based society. Developed in 1985 by Dr. Paul Levinson, who has taught courses at the New School's Greenwich Village campus for many years, the program may be the first of its kind to explore the uncertain juncture in which a new electronic medium and method of communicating is introduced into society.

At the New School, what one studies is as unique as the way it is studied. Now in its 12th year, its Internet-delivered program includes courses like Online Journalism and Ethics in the Technological World. In the McLuhan Seminar, learners revisit Marshall McLuhan's seminal work on the role of media in relation to the personal computer and Internet revolution.

The New School's curriculum and electronic campus were developed by Dr. Levinson's not-for-profit company called Connected Education, which specializes in electronic media and educational delivery. To give geographically dispersed learners a feeling of collegiate belonging, Connected Education's campus includes the Connected Ed Cafe, an online conferencing system with real-time exchange, and a virtual library. Students participate from around the world, including Africa, Japan, and Russia. Program information as well as announcements of new degree offerings for the upcoming year may be retrieved from Connected Education at <http://www.cinti.com/connect-ed/welcome>.

Many virtual curricula are being revised to accommodate a new breed of learner—the professionally accomplished adult. While on-campus programs have focused on teaching 18-to-24-year-old students, the

**The New School's program may be the first to explore the uncertain juncture of a new electronic medium in society.**

online market is more likely to be older, more affluent, and considerably less amenable to being spoon-fed textbook material. In place of theory, many electronic graduate schools are using online technologies such as video-conferencing to pair up learners to work on practical projects that rely on the team troubleshooting model that is prevalent in today's work world.

## Transcontinental Campuses

The Internet allows wired learners in the United States to study abroad without leaving home. The following international graduate schools accept students from the United States to their no-residency or low-residency Internet-assisted distance-learning programs.

### Athabasca University

<http://www.athabascau.ca>

*An online Master's in Business Administration and Master's in Distance Education from Canada's premiere distance-learning university.*

### Henley Management College

<http://www.henleymc.ac.uk>

*An online Master's in Business Administration from a well-respected British b-school.*

### University of London - Centre for International Education in Economics

<http://www.soas.ac.uk/Centres/CIEE/>

*A no-residency virtual Master's in Economics and Finance from one of Europe's best schools of finance.*

### University of South Africa

<http://www.unisa.ac.za>

*Campus-free, research-based Master's and Doctorate's in many fields from one of the world's largest distance graduate schools.*

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George Washington University's Graduate School of Education and Human Development (<http://www.gwu.edu/~etl>) has taken its doctorate of education in executive leadership—one of the oldest such academic leadership programs in the United States—into cyberspace. One weekend each month, learners converge on the Northern Virginia campus for live instruction and mentoring. Between campus visits, students use e-mail and electronic conferencing to discuss group projects and problems.

Pepperdine University uses a combined face-to-face and Internet-assisted distance-learning option to educate adult learners in its doctoral program in educational technology (<http://moon.pepperdine.edu/gsep/edtech/home.html>). Remote-learning teams use e-mail, newsgroups and multi-user environments like MUDs and MOOs to address issues raised in mandatory face-to-face seminars. The seminars are held on weekends three times each trimester at Pepperdine's Culver City, Calif., campus.

If busy professionals crave desktop universities and the Internet continues to

prove a rich and convenient interactive campus, what's to keep most graduate schools from leaping into the cyber league in the coming century? Jamie Switzer of Colorado State University's distance MBA program cites one key problem in delivering education via the Net: less than ubiquitous access to advanced technologies.

"We are moving toward video delivery of courses over the Web. We have the technology to do it; the problem lies with the students. Most do not have the hardware and software capability to receive video via the Web. Just because we as educators can do all sorts of really groovy things using the Web doesn't necessarily mean everyone can access it."

With a 175-year history of building and filling ivy-espalliered halls, and only a handful of years delivering programs electronically, George Washington University is sold on the cyber-education movement.

According to Ted Christensen, GWU Television's assistant vice president, electronically assisted distance learning is not a fad or an educational add-on. "It is key to the future of GWU," he said. Two new electronically assisted graduate programs, one in public health and one in engineering management, will be launched through GWU TV this fall at <http://gwis.circ.gwu.edu/~gwtv/>.

GWU president Stephen Joel Trachtenberg, addressing an international distance-learning conference earlier this year, lamented the demise of the peripatetic medieval model of education in which esteemed educators in robes traveled and talked about the classics from a podium while eager-eared innocents took notes at their feet.

"What the ancients knew as well as we do—that what's inside our heads is completely portable and can be carried anywhere—is suddenly being facilitated by our state-of-the-art technology," he said.

NYU's Vigilante said his work as director of the NYU's Virtual College has convinced him that the future of online adult education and training is "golden." In today's technology-rich, time-crunched world, he said, online education is "simply a better way to teach and learn." ■

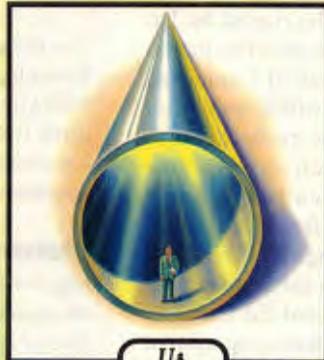
*Vicky Phillips (lifelearn@aol.com) writes frequently on education and*

maintains the Adult Education & Distance Learner's Resource Center @ <http://www.together.net/~lifelong>

## Which Pipeline Will You Use to Deliver your Web Site to Your Customers?



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Us.

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