

## TRAINING

# Virtual Classrooms, Real Education

*The latest, most flexible, and typically least-expensive form of "distance learning" is within your reach on the Internet.*

By Vicky Phillips

In 1840, Sir Isaac Pitman, the English inventor of shorthand, came up with an ingenious idea for delivering instruction to a potentially limitless audience: correspondence courses by mail. Pitman's concept was so hot that within a few years he was corresponding with a legion of far-flung learners.

Distance learning—in which instructor and student remain geographically apart—has boomed since Pitman pioneered it. Now it is delivered via mail, cable television, satellite broadcasts, videotapes—and, most recently, the Internet.

Moreover, the rapid development of online learning has caught the attention of small-business owners. The Internet is proving to be a low-cost, flexible, and highly effective medium for employee training in a range of subjects, especially computer skills.

Cost alone can be an incentive for going to cyberspace for training. Classroom-based seminars on using software can cost hundreds of dollars a day for course tuition; training materials; employee travel, meals, and lodging; and the time spent in transit.

Desktop training eliminates many of those expenses, leaving only the costs of the courses and instructional materials.

Moreover, the relative ease of comparing costs among online-learning providers can be appealing for employers. In choosing the most cost-effective training program, it matters little whether the education provider is based down the road or around the world. A course can be purchased and delivered overnight to any employee anywhere in the world who has a PC equipped with an Internet connection.

## Cost Comparisons

When Barbara Epstein, site manager of the historic Physick House in Philadelphia, wanted instruction in computer ap-

plications to manage her tasks, she looked closely at costs. She shopped around for courses on computer applications such as Microsoft Corp.'s Access, Word, and Excel. Although she lives close to several top colleges and universities, she says, she found

at Physick House and to organize her appointments and the tours conducted there.

ZDNet University offers courses in popular applications and operating systems such as Microsoft's Windows 95, Excel, and PowerPoint as well as in programming lan-



PHOTO: GIAL DIMARCO JR.—BLACK STAR

**To master the software for inventorying antiques at Philadelphia's historic Physick House, site manager Barbara Epstein chose online instruction because of its low cost.**

that none could beat the price offered by ZDNet University ([www.zdu.com](http://www.zdu.com)).

It is a new online training service of Ziff-Davis, a media and marketing company (now a division of Tokyo-based Softbank Corp.) focusing on computers and the Internet. Among Ziff-Davis' several computer publications is *PC Magazine*.

For \$4.95 a month, Epstein has unlimited access to the self-paced tutorials, located on the World Wide Web. "It's definitely cheaper than video or [classroom-based] computer-software courses," she says, and the low cost relative to other options she considered was the main reason she signed up.

Epstein is using the training to build an inventory-tracking system for the antiques

and Web-site design. Each online course consists of about 30 interactive tutorials focusing on a specific function of the chosen software and requiring about 10 to 30 minutes to complete. Students can work through all the tutorials in any course or choose only those for the skills they seek to master. There is no need to buy expensive supplemental textbooks. All instructional materials are archived on the Web.

## Meeting A New Demand

The growing need for inexpensive, just-in-time training in business subjects and computer technologies is being served by instruction-materials firms such as Waite Group Press, in Corte Madera, Calif. Waite

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Group has tied its best-selling tutorial books to an interactive online educational center called the eZone, on the Web at [www.waite.com/ezone](http://www.waite.com/ezone). The result: "For the price of the book—\$50 more or less—you get a whole school," says Charles Drucker, associate publisher of Waite Group Press.

Each Waite Group tutorial book covers a specific Internet, computer, or programming technology, such as programming languages Java or hypertext markup language (HTML). The books contain more than 90 lessons coupled with application exercises and end-of-chapter tests.

Each book comes with a CD-ROM that links the student to the eZone site for quizzes and online conversations with other students.

### Designed To Teach

The Waite Group's approach to online learning proved to be just what Charles K. Reed needed. Reed, an information specialist, runs the Columbus, Ohio, office of The Graphics Department, Inc., an eight-person firm based in Troy, Mich. It does various types of design work, including Web pages. He needed to learn a programming language called Perl (Practical Extraction and Report Language).

Rather than sign up for a classroom version of the instruction, Reed chose Waite Group's tutorial book. He used the book's CD-ROM to log on to the eZone to work through online quizzes and to swap ideas about Perl with fellow students by way of online discussion groups.

Reed was so pleased with the low cost and the ease of learning through eZone that he persuaded a co-worker to take the Perl course. Though the co-worker, a graphic artist, was reluctant to tackle a programming course, he told Reed afterward that "it was the easiest thing he'd ever learned."

After his first course, Reed went on to take Waite Group online classes in the C++ programming language, Adobe Systems Inc.'s Photoshop design and production tool, and Visual Basic, a programming system from Microsoft. He now serves as an online tutor, helping new students in Photoshop and Visual Basic with their questions as they enter the eZone for their own courses.

Drucker says the eZone creates a "little red schoolhouse in cyberspace," making an

analogy to the old, one-room schoolhouse, in which all the grades were together and students ended up teaching one another.

"Peer teaching," says Waite Group's Drucker, "allows people of varying levels of expertise access to each other. People may be afraid to admit their deficiencies to a teacher, but they will admit them to each other." Students can communicate with one

teacher. McClellan, director of the San Fernando Valley Convention and Visitors Bureau, helped Gordon develop her business concepts. "She even custom-tailored the final project for me to fit my unique business-research needs," says Gordon. "I've never had a professor do that for me."

Then, after completing the course, Gordon met McClellan at a travel-industry conference. There, McClellan introduced Gordon to people who later became key networking resources and clients.

Online classes can also give small-business owners access to colleagues from outside the United States. William Nix, CEO of W.E. Nix & Associates, an Internet consulting firm in Los Angeles, taught an online course last year for UCLA Extension, titled "Doing Business in Eastern Europe." To Nix's surprise and delight, all 45 students who enrolled in his course logged on from other countries.

Because the class was online, Nix was able to bring together students from different countries who could discuss the

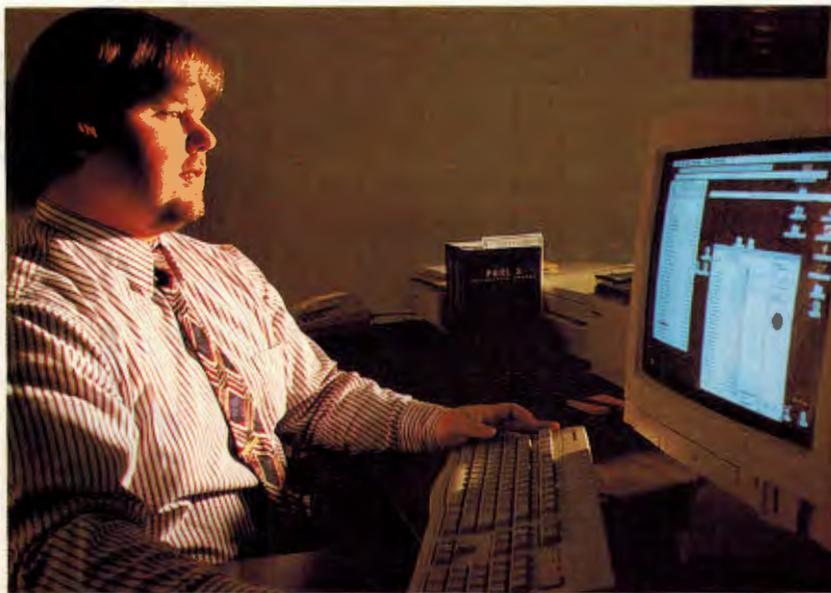


PHOTO: GJM CALLAWAY

**Forgoing the classroom,** design-firm manager Charles K. Reed of Columbus, Ohio, logged on to the eZone for instruction in a programming language.

another via electronic mail or in live chat rooms. Reed sees the eZone's online discussion groups as invaluable tools for allowing peers to address the real-world glitches that computer technology sometimes presents.

For a small-business owner or employee who needs to get up to speed on a computer language or software application and has no co-worker to serve as a teacher, the eZone model can be an ideal learning environment.

"Studying online is as close to a one-to-one tutorial as you can get," says Cathy McGuire, director of online learning at the University of California at Los Angeles Extension.

### A Broad Curriculum

Although computer-skills courses are among the most popular ones online, there are many other types of offerings.

When Nancy Gordon, owner of Customized Travel Research in Boise, Idaho, registered for an online course in travel and tourism from the UCLA Extension, she wasn't sure what to expect. She says now that she got the best educational experience of her life for about \$500.

Gordon's online instructor, Joanie McClellan, turned out to be more than just a

real-life issues of doing business in various cultures. Students read classic business texts, but they also received focused input from their fellow classmates on commercial practices worldwide.

Once you have found the right online course at the right price, you typically can do the work whenever your schedule permits. "Time was my critical factor in turning to online learning," says Gordon. "In my travel consulting business, I have to work sometimes until 2 a.m. With an online course, I could read the e-mail from my instructor and do my homework after 2 a.m. You can't replicate that kind of freedom in a classroom setting."

For self-paced, online tutorial programs such as those operated by Ziff-Davis University, students can manage their time by beginning or ending a course at the exact point where they feel they need assistance. Unlike the routine in a classroom, where everyone begins with Lesson 1, many online tutorials let students begin wherever their skill level permits.

### Earning A Degree Online

Because the Internet was pioneered at universities to facilitate information sharing, it's no surprise that an increasing

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number of them are creating Web-based universities.

An estimated 180 accredited graduate schools and more than 150 undergraduate colleges and universities now support distance-learning degree programs, and an increasing number of the programs are Web-based. (See the listing below.)

Many online universities are catering to

business's rising demand for skill-development courses delivered to the employee's desktop. For example, Champlain College in Burlington, Vt., offers Web-based programs built upon a core of business and computer classes and leading to professional certificates as well as associate and bachelor's degrees.

As with many online programs, the cur-

riculum at Champlain is not simply textbook-based. Each online class is designed to emphasize what John Lavallee, director of online programs, calls "experiential understanding."

Says Lavallee: "We use case studies, group exercises, and real-life work problems. We test the students not by giving them multiple-choice exams but by say-

# Courses By Keystroke

Here are the names of online directories that offer help in locating accredited online degree programs, followed by some of the many colleges and universities throughout the country that offer online courses and degree programs in business and technology.

### Online Directories

**California Virtual University**  
[www.virtualu.ca.gov](http://www.virtualu.ca.gov)

**Distance Education and Training Council**  
[www.detc.org](http://www.detc.org)

**Guide to Online Colleges, Virtual Universities & Training Institutes**  
[www.together.net/lifelong/dlsites.html](http://www.together.net/lifelong/dlsites.html)

### Online Business And Technology Colleges

**Brevard Community College—Virtual Campus**  
Cocoa, Fla.

[www.wcc-eun.com/brevard/index.html](http://www.wcc-eun.com/brevard/index.html)  
1-800-225-3276

Programs leading to associate degrees in drafting and design technology, electronic-engineering technology, environmental science, hazardous-materials technology, hospitality management, international business management, logistics-systems technology, marketing management, and solar-energy technology.

### Champlain College

Burlington, Vt.

[www.champlain.edu/OLDE/index.html](http://www.champlain.edu/OLDE/index.html)  
1-888-545-3459

Certificates and associate degrees in subjects such as accounting, business, computer programming, hotel and restaurant management, and travel and tourism. In addition, bachelor's degrees in computer programming and business.

### City University Online

Bellevue, Wash.

[www.wcc-eun.com/city/Index.html](http://www.wcc-eun.com/city/Index.html)  
1-800-225-3276

Bachelor's degrees in subjects such as accounting, business administration, computer systems, energy and environmental quality, management, and marketing.

### Empire State College of the State University of New York

Saratoga Springs

[www.esc.edu](http://www.esc.edu)

(518) 587-2100

Individually designed and mentored bachelor's degrees in business and management and labor studies.

### New Jersey Institute of Technology

Newark

[www.njit.edu/DL/](http://www.njit.edu/DL/)

1-800-624-9850

Bachelor's degrees in computer science and computer information systems.

### New York Institute of Technology

Old Westbury

[www.nyit.edu/olc](http://www.nyit.edu/olc)

1-800-222-NYIT (1-800-222-6948)

Bachelor's degrees in business administration, telecommunications management, and hospitality management.

### Pennsylvania State University

State College

[www.cde.psu.de/](http://www.cde.psu.de/)

1-800-252-3592

Certificates in business management, small-business management, advanced business management, business logistics, purchasing management, and human resources. Associate degree in business administration.

### Rogers University Online

Claremore, Okla.

[ruonline.edu/](http://ruonline.edu/)

(918) 343-7548

Associate degrees in computer science and business management.

### Thomas Edison State College

Trenton, N.J.

[www.tesc.edu](http://www.tesc.edu)

(609) 292-6565

Bachelor's degrees in applied science and technology, including specializations in engineering, computer science, and electronics. Bachelor's degrees in business administration, including a specialization in small-business management/entrepreneurship. Master's degree in management.

### University of California at Los Angeles Extension—The Home Education Network

[www.then.com](http://www.then.com)

1-800-784-8436

Courses in business, computers, entrepreneurship, and international business.

### University of Maryland—Bachelor's Degree At A Distance

College Park

[www.umuc.edu/bdoad](http://www.umuc.edu/bdoad)

1-800-283-6832

Bachelor's degrees in 13 academic areas.

### Virtual MBA Programs

#### Baker College

Flint, Mich.

[www.baker.edu](http://www.baker.edu)

1-800-469-4062

#### Colorado State University

Fort Collins

[cobweb.cobus.colostate.edu](http://cobweb.cobus.colostate.edu)

1-800-491-4622

#### Duke University

Durham, N.C.

[www.fuqua.duke.edu/](http://www.fuqua.duke.edu/)

(919) 660-8011

#### ISIM University

Denver

[www.isimu.edu](http://www.isimu.edu)

1-800-441-ISIM (1-800-441-4746)

#### New York Institute of Technology

Old Westbury

[www.nyit.edu/olc](http://www.nyit.edu/olc)

1-800-345-NYIT (1-800-345-6948)

#### Regis University

Denver

[www.mbaregis.com](http://www.mbaregis.com)

1-888-MBA-REGIS (1-888-622-7344)

#### University of Phoenix Online

Phoenix

[www.uophx.edu/online](http://www.uophx.edu/online)

1-800-742-4742

#### Worcester Polytechnic Institute

Worcester, Mass.

[mgt.wpi.edu/graduate.htm](http://mgt.wpi.edu/graduate.htm)

(508) 831-5957

ing, "Here is a problem this company is having; how is your group going to solve this?"

Champlain's online program, begun in 1993, has expanded rapidly, enrolling more than 550 students from around the world. The most popular courses, Lavallee says, are in computer programming, network administration, business, and accounting.

"We have a lot of people earning their first degree online with us," says Lavallee, "but we also enroll a lot of people who have bachelor's, master's [degrees], even Ph.D.s who are studying online with us for career-skills enhancement."

Full-credit college courses typically cost \$300 to \$1,000.

Most online classes don't require that



PHOTO: ©DAVID R. FRAZIER

**An online course in tourism** not only was educationally top-flight, says travel researcher Nancy Gordon of Boise, Idaho, but also led to new networking resources.

students have the latest high-powered computer, but Internet access is a must.

**Choose Carefully**

Before enrolling in any online college, make sure that your chosen program is

recognized by either a regional accrediting agency or the Distance Education and Training Council. The council is a nonprofit, nationally recognized accrediting agency located in Washington, D.C.

At the rate that online course offerings are expanding, it's clear that the Internet has added a popular new twist to the correspondence courses of old.

Sir Isaac Pitman, no doubt, would be pleased. **NB**

*Vicky Phillips (lifelong@together.net), of Waterbury, Vt., is co-author of The Best Distance Learning Graduate Schools: Earning Your Degree Without Leaving Home, to be published in August (Princeton Review, \$22.50).*

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