Chapter 5

Web-Based Education

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The Internet is changing the very nature of society in ways unparalleled since the industrial revolution. It is affecting local, national and global economies and their infrastructures. Information is available at any time from any place to any Internet user. This is creating tremendous opportunities for universities to provide a learning environment that is accessible to all. The “same time, same place, only some people” traditional educational environment is giving way to “anytime, anyplace and anybody” instructional models. For universities, the question becomes how to preserve and expand the desirable aspects of face-to-face teaching models when translating them into the new environment of Web-based education (WBE). This challenge is made even more complex when seen in the context of other trends in education: the transition from passive classroom lectures to hands-on, student-centered, interactive learning; the perception of students as “customers,” with increased control over the learning process; a higher education market where traditional universities have to compete with for-profit enterprises.

This chapter examines Web-based education and argues that it can successfully simulate face-to-face teaching models, while adding some unique features made possible by the technology. To be successful, however, this simulation requires adjustments in many areas, including student assessment, faculty training and expectations, and student expectations and motivation. In addition, the chapter examines several critical aspects of Web-
based education, including technological, administrative, quality and control issues that need to be addressed in order to create favorable environments for Web-based education.

Information technology, especially the Internet, is creating tremendous opportunities in many areas and education is no exception. Electronic commerce is increasing by leaps and bounds, having already surpassed in 1999 the $300 billion mark that the Department of Commerce had estimated for the year 2003 (Church, 1999). The Web is becoming a virtual library where information about anyone and anything is available at practically little or no cost. People are planning trips, getting medical advice, meeting friends, playing games and chatting with like-minded strangers on the Internet.

Education is not far behind. Many virtual educational organizations are emerging and providing full-fledged curricula, sometimes with very little in-house staff, contracting out faculty to teach specific courses. The University of Phoenix is probably the most successful example of a university dedicated to Web-based teaching. With little or no physical presence in any given geographical area, the University of Phoenix has been able to attract many students and faculty worldwide. Several traditional universities, like Duke, MIT, NYU, and Georgia Tech, have successfully joined the Web movement (Schroede, 1998). There is a great variety of Web offerings in traditional universities, ranging from only a few select courses or topics in continuous studies to full curricula and formal degrees (www.uis.edu/~schroede/sources.htm). Some universities offer Web courses directly, while others create on-line “extensions” of their regular programs.

The Web-based education phenomenon is being felt throughout the world. Organizations such as the Commonwealth of Learning (COL) are emerging to help developing nations improve access to quality Web-based education and training. Web-based courses are being offered in universities in developing countries and regions as varied as India, Sri Lanka, Africa and South America. For example, in India, Web-based courses in engineering and business are being jointly offered by strategic alliances between “Education To Home” (http://education.eth.net) and several well-established universities.

WHY WEB-BASED EDUCATION?

Traditional universities face some basic questions when confronted with this new electronic environment. Can the Internet be used effectively for their
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