



## **Chapter VI**

# **How to Compete in a Global Education Market Effectively: A Conceptual Framework for Designing a New Generation eEducation System**

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## **ABSTRACT**

*Computer-aided instruction (CAI) has existed for decades. Its third generation system using Internet and Web technologies to deliver university education (so called virtual universities) has been a hot research topic in recent years. However, few such virtual universities have been as successful as expected. Why didn't eEducation systems turn out to be a silver bullet for virtual universities as expected? What are components and elements that have been missed in current eEducation systems? How can we learn from past experience and lessons so that a conceptual framework could be proposed to design a better next generation eEducation system that could help universities and corporations to gain competitive advantages in a global education market? This*

*research paper tries to explore these important issues. Based upon a comprehensive literature review, a conceptual framework is proposed with the aim of guiding the design of a next generation eEducation system.*

## INTRODUCTION

Computer-aided instruction (CAI) has existed for decades. Its third generation systems using Internet and Web technologies to deliver education programs in global market has been a hot research topic in recent years (Al-Nuaimy, Zhang, and Noble, 2001; Bodendorf and Swain, 2001; Chandler, 2002; Chang, 2001; Jung, 2001; Kinshuk, 2002; Owston, 2000; Rovai, 2001). Online education and training (i.e., eEducation) is a multi-billion-dollar business (Barger et al., 2002; Snell, 1997) and also one of the important issues currently faced by global multi-national corporations and universities.

The American Bankers Association (ABA) predicts that spending by U.S. banks on all types of training, which is now approximately \$2.3 billion a year, will increase 12 percent in 2003. The use of online courses (i.e., eEducational courses) in banks can dramatically lower costs of training (Wetzel, 2002) and easily deliver the educational programs across national geographical boundaries (Barker, 2001; Lee, 2001; Topper, 2002; Huang, Lienhart and Yen, 2003).

Many universities in the world are looking at the Internet as an effective way to help them compete in a global education market. In the U.S., there has been a 300% increase between 1995-1998 in the use of web pages for classes in public research universities and 500% increase during the same time period for private educational institutions. It is estimated that 55% of the United States' 2,215 four-year colleges and universities have courses available off-site, and over one million students are now attending virtual college classes (Huang, Lienhart and Yen, 2003). According to the management philosopher Peter Drucker: "Universities won't survive. The future is outside the traditional campus, outside the traditional classroom. Distance learning is coming on fast" (Forbes, 1997).

eEducation has a potential to decrease the cost of delivering education programs, which is especially important and attractive to educational programs that are marketed to international students in developing countries. For online students, the University of Phoenix in the U.S. charges \$325 a credit for its B.S. program. With 102 course credits required for graduation, that is \$33,150 for a degree program, just about one-third the cost of going to Yale University for four years. It costs the university \$237 to provide one credit hour of education on-line, against \$486 per hour for conventional education at Arizona State University (Huang, Lienhart and Yen, 2003). On average, the on-line students scored 5% to 10% higher than their traditionally educated peers and maintained that margin upon completing their coursework (Forbes, 1997).

Because of the potential substantial benefits and competitive advantages that may be provided by eEducation programs, many universities around the world invested substantially in building up eEducation systems to set up so-called virtual universities (Coppola, Hiltz and Rotter, 2002) that have no national geographical boundaries and could reach potential international students even in remote countries at much lower cost. As a result, it has been predicted that such virtual universities could at least partially substitute education programs offered by current physical universities. However, until now, few such virtual universities mainly supported by eEducational systems have been

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