Chapter 14
Enhancing Education in the UAE through Blended Learning

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ABSTRACT

The advent of technology has changed the landscape in post-secondary academic institutions and technology-enhanced university courses are becoming the norm. While Distance Education was previously restricted to traditional correspondence having limited options for student interaction with the instructor and no interaction with other learners, technology’s progression changed the context drastically. One of the emerging delivery modes is blended learning which combines the advantages of technology enhanced face-to-face instruction and electronic supported learning. The chapter offers a general overview of the influence of technological development on the post-secondary Distance Education sector and presents the advantages of the blended learning approach. Insights are offered from a UAE e-learning University case study while discussing implications for university professors and faculty members pertinent to instructional design and course delivery.

INTRODUCTION

Research is not needed to demonstrate that the advent of technology has changed the landscape in post-secondary academic institutions. At the present time, technology-enhanced university courses (in-class and/or out-of-class) are becoming the norm. Computer technology tools are used for presentation, content organization and delivery, knowledge search and retrieval, collaborative activities and knowledge building, in addition to synchronous and asynchronous communication. This is true for universities around the world, and the United Arab Emirates (UAE) is no exception. One of the main sectors that have been highly influenced by the advent of computer technology and Internet throughout the world is Distance Education (DE). Prior to the technological innovation boom and the widespread use of the World Wide Web, DE was mainly limited to correspondence between the student and the professor through regular mail. Students received course content and submitted assignments by mail while having limited interaction with the instructor and almost
no interaction with other students. Technology’s progression changed the DE context drastically, and educational institutions are increasingly taking advantage of developments in computer and communication technologies leading to a variety of modes through which learning is provided. One of the most prominent emerging delivery modes is blended learning which combines the advantages of technology enhanced face-to-face instruction and electronic supported learning. Within such contexts, three major forms of interaction (student-instructor, student-student, and student-content) are highly important for effective learning to occur (Moore, 1989; Moore & Kearsley, 2005).

This chapter offers a general overview of the influence of technological development on the post-secondary DE educational sector around the world and the UAE, including its influence on the advent of blended learning. The chapter will also draw on research findings pertaining to ensuring the successful support of the three forms of interactivity in course design. Finally, the chapter will highlight how blended learning can support the successful transformation of the Arab educational systems from the current traditional status to more vibrant and innovative ones by offering insights from a case study of an e-learning university in the UAE.

**Technology and Education**

The level to which computer technology has permeated our lives is undeniable. Whether a believer in its advantages or not, one has to admit that it is a central part of the daily life in the 21st century. The pervasiveness of computer technologies, including information and communication technologies, has reached a level at which it is almost impossible to find a household or an institution that is computer and Internet free.

The profusion of computer technology has not always been the case nor has it been a predictable progression of events during the earlier years of development in the computer technology arena. Although not fully supported by documented evidence, it is alleged that in 1943 Thomas Watson, the chairman of IBM said: “I think there is a world market for maybe five computers” (“Thomas J. Watson”, 2008) reflecting the overall perception about the future of computers at that time. Nevertheless, the advent of technology and its forward march has been so steady and quick it led Bill Gates to claim that: “If GM had kept up with technology like the computer industry has, we would all be driving $25 cars that got 1000 MPG” (Bill Gates quotes, 2008).

It is not surprising that the education sector experienced the ripples of the computer technology wave since its early days. Ever since the late 1970’s when microcomputers became available and Apple II microcomputers succeeded in accessing schools (Alessi & Trollip, 2000) the computer technology march into the classroom has grown stronger by the day. The list of terms emerging due to the development of learning technologies is growing by the day and it includes computer-assisted instruction, computer-based instruction, intelligent tutoring systems, videoconferencing, interactive multi-media, web-based instruction, e-learning, assistive technology; audio-visual communication; virtual-classrooms; virtual universities; and blended learning.

Throughout the years, many researchers have argued that computer technology will help change the teachers’ role from the sage on the stage to the guide on the side while supporting meaningful and active learning (Jacobson, 1998). Higher achievement, increased motivation, enhanced self-confidence, greater student satisfaction, and more effective support for special needs students are only some of the desired and promised benefits. Other advantages include improved presentation of course content, improved learning outcomes, increased access to information, easier and faster communication, enhanced problem solving skills, and active involvement of students in knowledge construction. While it is not fully clear how and