# Chapter 12
# The E–Learning Experience in Medical School of Casablanca

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## ABSTRACT

*In recent years, higher education has witnessed significant growth. This unprecedented phenomenon can be attributed to distance education through the application of ICTs. The purpose of this chapter is to bring into focus the experience of e-learning implementation at Casablanca Medical School and investigate learners' attitudes towards e-learning strategy. Of particular relevance to this study are the implementation of two e-learning projects, namely the "Digital Environment Work" (DEW), which allows medical students, faculty, and administrators to access information and online services, and the "@U-PEL 2010 program," which was launched by Hassan II University in 2010 with a view to supporting holders of a comprehensive strategy for the development of e-learning institutions on the basis of clearly identified projects.*

## INTRODUCTION

Economic, social and technological forces have changed the global economy, and the way of life in the world. Specifically, these forces have revolutionized teaching and learning. Technology, the rapid obsolescence of knowledge and training, the need for just-in-time training delivery, and the search for cost-effective ways have redefined the processes that underlie design, development and delivery of training and education.

Over the past two decades, there has been a worldwide proliferation of information and communication technologies (ICT, henceforth) into the field of education. The global adoption of ICT into education has often been seen as a promising tool to revolutionize an outmoded educational system, better prepare students for the information age, and/or accelerate national development efforts (Albirini, 2006). Thioune (2003) notes that e- learning is one of the most rapidly growing fields of education, and its potential impact has

been greatly accentuated through the development of ICTs (Thioune). These technologies enhance the effectiveness and efficiency of the educational system through the transmission of different sorts of information required to facilitate the learning process and through adequate learning materials to meet users' needs (Bertea, 2009). In developing countries, the above promises have generated a national debate about the necessity of educational reforms that will accommodate the new tools (Pelgrum, 2001).

Today, medical education is facing challenges in terms of knowledge, skills and attitudes, resulting in less time for teaching than has previously been the case (Ozuah, 2002). Transition in sites of health care delivery from acute care institutions to community-based settings for chronic care has required adaptations in educational venues (Nair & Finucane, 2003). Therefore, to be considered competent to practice, medical students must cover new fields such as palliative care, geriatrics, genomics and complementary medicine while current medical school curricula is challenged to teach conventional materials (Ozuah, 2002). The traditional learner-centered model that puts learners in control of their own teaching has undergone a major shift toward competency-based curricula that emphasizes the learning outcome rather than the process of education (Leung, 2002). In this changing paradigm, educators are becoming facilitators of learning and assessors of competency; they no longer serve as the sole distributors of content (Ruiz, Michael, Mintzer & Leipzig, 2006).

E-learning gives medical educators the occasion to improve the efficiency and effectiveness of educational materials by providing them with a set of online resources to facilitate the learning process (Chodorow, 1996). Furthermore e-learning transforms the role of the teacher, allows learning to be individualized, and enhances learners' interactions with others, which seems to point toward a revolution in education (Ruiz, Michael, Mintzer & Leipzig, 2006).

An appropriate infrastructure to support e-learning within medical education namely repositories, allows clinicians to access a virtual database and get at the same time answers to clinical questions and the latest research information (Ruiz, Michael, Mintzer & Leipzig, 2006). E-learning also uses multimedia to assist with assimilation of medical content. A video clip that shows a child with a stridor, a ''flash'' animation that demonstrates a cellular process, a written case with pictures (a rash)/audio (heart sounds) to demonstrate a physical sign; the technology of such technologies allows medical students to practice away from the bedside or perhaps in areas where contact with certain pathologies is limited (Choules, 2007).

E-learning is defined as the acquisition and use of knowledge distributed and facilitated primarily by electronic means (Jansen, Hooven, Jägers & Steenbakkers, 2002). It may incorporate synchronous or asynchronous access and may be distributed geographically with varied limits of time. The learning is carried out either individually or on a small or large group basis and can be used as a hybrid to the face-to-face format, or exclusively in open and distance learning (ODL). As such, e-learning is not confined to the boundaries of the online format but also includes the offline format using any form of electronic media to facilitate the teaching and learning processes (Garrison & Anderson, 2003).

E-learning offers learners a number of advantages (Ruiz, Michael, Mintzer & Leipzig, 2006): Control over content, learning sequence, learning pace, and time allowing them to tailor their experiences to meet their personal learning objectives (p.207). In many contexts, students are very satisfied with e-learning compared to traditional learning (Gibbons & Fairweather, 2000; Chumley-Jones, Dobbie & Alford, 2002). However, students do not see e-learning as replacing traditional instructor-led training but as a complement to it, forming part of a blended-learning strategy (Gibbons & Fairweather; Chumley-Jones

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