Chapter 16

eLearning: Challenges and Opportunities

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ABSTRACT

eLearning will revolutionise higher education in the next decade. Although this has likely been said regularly over the last 20 years, the widespread availability of mobile devices, ubiquitous wifi connections, and the globalisation of industry, driven by global networking infrastructure, will finally deliver the promises of learning anytime anywhere. This chapter reviews the most common forms of eLearning, both synchronous and asynchronous: recorded lectures, learning management systems, online assessment, blogs, and wikis are slowly transforming education towards a student-centred model of learning. The question remains: what is the university’s business model when students can collect their learning resources for free from iTunesU?

INTRODUCTION

In today’s globalised world, learners need to have access to learning regardless of their location and social status. Learners should have the opportunity to pursue their education and have access to learning resources at their own pace, place and time. eLearning offers an alternative to the traditional classroom education. According to a 2008 study conducted by the U.S. Department of Education for the 2006-2007 academic year, nearly 66% of postsecondary public and private schools offered some distance learning courses (Degree Directory, 2013). In 2008, the Council of Europe passed a
statement endorsing eLearning’s potential to drive equality and education improvements across the European Union (Council of Europe Recommendation 1836, 2008).

Based on communication and information technologies, eLearning uses both digital and electronic tools including internet, intranets, extranets, satellite broadcast, audio/video tape, interactive television/media, and CD-ROM, in order to facilitate and deliver course and program contents effectively to students at anytime and anywhere. eLearning includes a new mix of resources, interactivity and achievements; new structures for learning, a combination of teaching services using technological tools that adds value, anytime and anywhere (Kaplan-Leiserson, 2007). eLearning comprises of three main components such as a) contents, b) technologies, and c) services (Henry, 2001). The contents are the didactic units or reusable modules of the eLearning process. The technologies are the technological platforms that support the educational systems, including communication networks, protocols, and learning management systems among others (Serif et al. 2009). The services refer to the tracking and support offered to the students; e.g. lectures, tutorials, reports/assignments, assessments, course management, student feedback/motivation, and course quality assurance (Serif et al. 2009). Structurally eLearning systems encompass Learning Management Systems (LMS), Learning Content Management System (LCMS), Knowledge Pools, or Brokerage Systems (Serif et al. 2009; McCrea et al. 2000).

A Learning Management System is an application running on a web server that is used to perform learning activities. It is also called a Platform or Virtual Campus. It is a place where students, lecturers, and coordinators connect through the Internet to download contents, examine the topics of each course, send e-mails, chat with students, discuss in a forum, and run a tutorial (Serif et al. 2009).

A Learning Content Management System is a system that is independent or integrated into a LMS. It manages the learning contents. Once the contents are into the system, they can be assigned to each course, combined, and downloaded (Serif et al. 2009).

The Knowledge Pools are distributed repositories of metadata compatible with the Learning Object Metadata (LOM) standard which assure an efficient publication, search and restore of educative contents. An interesting characteristic of these servers is that they can be federated (Serif et al. 2009). The Brokerage Systems store the description of the educative resources available locally or at remote locations.

The multiplicity of eLearning systems provides numerous functions for education delivery improving the quality of online/distance learning and making greater acceptance to students. The extent to which eLearning assists or replaces other learning and teaching approaches and methods is difficult to predict as limited studies on this issue are currently available. However, some recent studies show that eLearning is as effective as face-to-face classroom teaching and learning (Serif et al. 2009; Bates & Poole, 2003; OECD, 2005; Baker, 2013; Strauss, 2013).

TYPES OF ELEARNING

eLearning can generally be classified into: a) synchronous and b) asynchronous. Synchronous learning takes place in real-time, with all participants interacting at the same time, while asynchronous learning is self-paced and allows participants exchanging ideas or information independently (Wikipedia, 2013).

Synchronous learning usually involves the exchange of ideas and information among students during the class time. A face-to-face discussion is an example of synchronous communication. In
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