Chapter 19

Generic Themes for Developing Research Skills through E-Learning:
A Case Study from Iran

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ABSTRACT

Research competencies are considered as a major part of post-graduate programs. With the introduction of new technologies in higher education, there has been particular emphasis to move to an e-learning variant of the teaching-learning process in developing research competencies. Based on the recent experiences, it seems the blended approach is more promising. In this regard, an experimental approach in designing and developing an e-course was adopted at a private e-learning university in Iran. The e-course was organized through a design-based approach. This chapter is a case study which presents an analysis of the factors that affected designing and developing the e-course. It points to the experiences gained through building the community of inquiry and discusses lessons learned.

BACKGROUND

In twenty-first century, information and communication technologies (ICT) have speeded globalization and the move towards "constructing knowledge society" (World Bank, 2002). This has reinforced many countries to build capacities to apply the ICT, in education system in general and higher education and life-long learning in particular. Such a move has been made to realize the new meaning of learning for developing knowledge society (Mashayekh, 2006). In this regard, it is recommended that higher education systems develop more diverse programs to respond to the needs of sustainable development (UNESCO, 2009). It is expected that by applying new technologies in higher education the quality of teaching and learning would be improved. Among the approaches to responding to such needs is e-learning (Bates, 2001; Oliver, 2001).

"E-learning can be defined broadly as any use of web and internet technologies to create learning experiences" (Horton & Horton, 2003, p. 13). It varies from an entirely online web-supported learning to web-enhanced classroom teaching. There has been research evidence on e-learning which indicates its advantages for adult learning and workforce development (D'Antoni, 2006). Furthermore, it has been argued that e-learning is an effort in meeting the technology challenge (Bates, 2000) and an approach to the removal of barriers that restrict access to university-level studies, relevance of programs to local needs and to increasing equality of educational opportunities for adult learners.

However, there are pre-conditions for success in e-learning programs. These include, among others: needs-based instructional design, appropriate technology, interaction/learner support, tutor/student ratio and local support, efficient administration systems (Bates, 2001). Furthermore, financing, professionals, and technology infrastructure are important to the success of e-learning programs. In developing countries, besides the limited infrastructure, there are social and cultural factors which should be taken into account in e-learning programs (Masoumi & Lindstrom, 2009).

Experiences of establishing e-learning systems in different countries are classified in to four categories. Based on this classification, there are four models of organizational development in e-learning (D'Antoni, 2006, p. 27):

1. newly created institution;
2. evolution of an existing institution;
3. a consortium; and
4. a commercial enterprise.

Although, developing countries try to apply the cutting-edge educational practices, due to structural and human factors, the results are not usually as expected. In Iran, as a developing country, the first model was adopted by private higher education and the second model by the public universities to initiate and develop e-learning systems, a decade ago. But, the expansion of e-learning, so far has been satisfactory.

The Iranian higher education institutions, by source of funding, may be classified into three types: a) public, b) non-public, and c) private. The public institutions are composed of more than hundred government-funded universities. The non-public institutions include Islamic Azad University system which may be partially funded by the government (Bazargan, 2000). The private institutions are not funded by the government.

A decade ago, the Iranian universities were so enthusiastic to apply the ICT for educational programs that more than 40 universities initiated some sort of activities to establish virtual classes or virtual campuses. However, gradually the number of universities that succeeded to offer degree programs through virtual campus decreased to ten. These universities introduced e-courses through the existing university structure. In this regard, the most important Iranian public university (MIPU) created a Deputy Rector for Information Technology (DRIT) in 2004. The DRIT was responsible for establishing and directing activities of the center for e-learning at the MIPU. It was hoped that the DRIT, through applying new learning technologies, would force the existing teaching practices to upgrade the quality and relevance of the educational programs and "meeting the technology challenge" (Bates, 2000). However, such initial over-enthusiasm for e-learning has given way to more cautious practice in Iran. In this regard, after two years when the rector of the MIPU was changed, the deputy-rector position (DRIT) was removed from the university's administrative structure. But, the e-learning center was revitalized; its status and activities were strengthened later on. In the past two years, the E-learning Center of the MIPU has gained momentum, and now it is expected to lead the e-learning activities in Iran (Bazargan & Assadi, 2008).

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