

# Chapter 4

## E-Learning Implementation in Developing Countries: Perspectives and Obstacles

**Jovana Zoroja**

*University of Zagreb, Croatia*

**Marjana Merkač Skok**

*Fakulteta za Komercialne in Poslovne Vede, Slovenia*

**Mirjana Pejić Bach**

*University of Zagreb, Croatia*

### ABSTRACT

*E-learning nowadays plays an important role in teaching because it is oriented toward the use of information and communication technologies that have become a part of the everyday life and day-to-day business. E-learning contributes to traditional teaching methods and provides many advantages to society and citizens. The main goal of the chapter is to explore e-learning use in developing countries, using Croatia as an example. This chapter identifies perspectives and obstacles defined by users and non-users of e-learning. Four in-depth interviews were conducted to get a more extensive picture of educational institutions that use e-learning in the teaching process. The results of this research indicate that the potential implementation of e-learning in developing countries faces a number of obstacles, mainly due to the restricted resources of professors and institutions measured both in time and financial terms.*

### INTRODUCTION

Since 1996, e-learning use has been increasing by 10% per year in the USA, Canada and some countries in Western Europe while simultaneously developing countries have been lagging behind. There are predictions that in Malaysia, Mexico,

India, Thailand, Singapore, South Korea, Taiwan, Brazil and Eastern Europe countries e-learning use will grow faster in the next ten years (Florea, 2010). Although there is a significant growth of e-learning in developing countries there are many limiting factors which yet have to be overcome (Bhuasiri et al., 2012). The unfavourable situation of e-learning in developing countries can be explained by several factors. Moussa and Moussa

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(2009) list a number of such factors, for example scarce use of modern technologies resulting from an insufficient amount of financial and technological resources, nonexistence of accreditation by internationally acknowledged organizations, and insufficient use of e-learning quality assurance measures.

*The mission of the chapter is to describe and examine the use of e-learning in education, focusing on the benefits and problems of implementing e-learning as one of teaching methods in developing countries, using Croatia as an example.* The comparison of the Croatian education system with education systems in developed countries leads to the conclusion that there are many positive changes that still have to be made in Croatia (Lowther, 2002), and one of them is higher implementation of e-learning. However, there are many obstacles to achieving such a goal, but at the same time incentives could be used as practical measures for increasing e-learning use. Based on the argument above, the following research goals have been set: (1) RG1: To present successful and less successful examples of e-learning courses in developing countries; (2) RG2: To investigate what expectations university professors have for e-learning; and (3) RG3: To explore possible reasons for using and not using e-learning in order to detect barriers and incentives.

In-depth interviews were conducted in order to attain goals of the chapter. Lecturers from the University of Zagreb were contacted and asked to participate in the research. Data were collected by in-depth interviews during 2012, and the participants were classified as users and non-users. In order to get the full picture of the current state and future trends in e-learning use, four in-depth interviews were conducted with the following participants: (i) a professor who uses e-learning, and plans to use it in the future; (ii) a professor who uses e-learning, but does not plan to use it in the future, (iii) a professor who does not use e-learning, but plans to use it in the near future;

and (iv) a professor who does not use e-learning, and does not plan to use it in the near future.

The chapter consists of the following parts. After the introductory part of the chapter, section 2 presents the background and the definition of the e-learning use in developed and developing countries, its advantages and disadvantages. The third section introduces the research design and methodology and reports on the results of the four in-depth interviews. The fourth section summarizes the results that are examined in detail in the fifth section. Future research directions and limitations of the chapter are also presented. The final section concludes the chapter.

## **BACKGROUND**

E-learning presents an innovative form of education which contributes to the quality of teaching and learning in higher education, but also in lifelong educational activities (García Peñalvo, 2005; García Peñalvo, 2008; Bhuasiri et al., 2012; Yacob et al., 2012). According to Wan (2008), e-learning presents a virtual learning environment in which information and communication technology is used to support the collaboration between students and professors. E-learning is tightly connected with web-based technologies (Sun, 2008). In literature synonym terms which refer to e-learning also stress the technology used: computer-based training (CBT), online learning (OL), virtual learning, internet-based training (IBT) (Rao, 2011). However, the most significant difference between e-learning and traditional methods of teaching is that e-learning can be applied to a large number of participants, with a large spectrum of learning methods (García Peñalvo et al., 2003; Beldagli & Adiguzel, 2010).

E-learning is a significant component in the knowledge economy and it helps companies, individuals and educational institutions become more effective during the educational process (Florea, 2010; Rao, 2011). Companies use e-

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