# Chapter XIX E-Learning Implementation and Its Diverse Effects

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#### **ABSTRACT**

The rapid growth of technological advances in recent years has opened a completely new dimension to progress in education and training. The emergence of e-learning has created not only business and educational opportunities, but also significantly improved the standard of the society. This chapter explores the implementation of e-learning and its impact on a community, similar to a university or corporate setup. To this aim, a brief introduction into e-learning technology and an example of using the Blackboard Learning System are brought forth, along with some critical success factors. Projecting the e-learning advantages along with the digital library concepts, the economic benefits of such implementation are highlighted. The discussion then moves to the perspective of students and teachers on e-learning. As the trend in the technological world is moving toward mobility, the wireless e-learning perception is also conferred. In the concluding remarks, e-learning implementation is noted as a positive endeavor to boost economic growth.

### INTRODUCTION

E-learning is a generic and concise term commonly used to describe technology-driven instruction in the fields of online learning. Webbased training, and software-based learning. The benefits of e-learning are no longer in dispute. As such, more and more educational institutions have included e-learning programs as part of their business model. As e-learning programs become the norm, the corollary effects of such adoption are not only felt at the level of the learner and the institution, but also at the societal level. To date, the proliferation of academic literature on the study of educational technology has yet to address the causal effects of e-learning programs and economic growth. The lack of study in this area does not in any way indicate the absence of this notion, but reflects a new consciousness that has just emerged.

This chapter investigates how e-learning programs contribute to the society. It also includes an analysis of a survey performed on a Malaysian university to explore the general attitudes toward e-learning, and analyze the relation between these attitudes and attitudes toward new technologies. The overall experience of the university in relation to the e-learning initiative is considered, and by doing so, the authors hope to substantiate the contention that e-learning augments economic growth. Quoting Mrs. Viviane Reding, European Commissioner for Information Society and Media (as cited by European eLearning Industry Group [eLIG], 2006), "If Europe is to be a dominant economic and social force on the global stage it must act as a cohesive unit wherever possible. E-learning is an opportunity for Europe to utilize the power of technology for real social and educational change, bringing benefits to academia and to business..." Mrs. Reding's reference to Europe can be extended to any other nation in the world, and her words resonate the belief that e-learning is a powerful tool that can bring about economic growth.

The organization of the chapter is as follows. Initially, the concepts of e-learning are introduced, followed by the core elements and technology in e-learning. Then, an example of an e-learning initiative based on a university scenario along with its implementation and critical success factors are presented. Subsequently, the benefits of e-learning with emphasis on the digital library are discussed in length. Later on, a statistical analysis of students' perception on e-learning is done. Immediately after is a brief account on the teachers' perception. As a future trend in e-learning style, the university network setup through secure wireless access is described, and eventually the chapter concludes with a positive note on e-learning and its overall effect on economic growth.

#### E-LEARNING CONCEPTS

The rapid growth of information technology has opened up the possibilities of corporate learning and a completely new dimension to progress in education and training. Educational and training programs that were once delivered only through a face-to-face setting can now be done electronically due to the advancement of technologies. As a result, the advent of e-learning has enabled not just flexible learning that is independent of time and space, but also significantly reduced the cost in acquiring necessary educational or professional training. E-learning is thus being considered by many to be the next revolution in the marketplace, with an estimated potential growth of 23.7 billion worldwide in 2006 according to a study conducted by the International Data Corporation (Downes, 2003).

Before going into further details of the e-learning concepts, it is necessary to look at some of the definitions of e-learning that have been proposed by various parties. Waller and Wilson (2001) from the Open and Distance Learning Quality Council in the United Kingdom defined e-learning as "the effective learning process created by combining

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