

## **THE ECONOMICS OF E-LEARNING** **[Online monograph]**

**David Castillo-Merino (Coordinator), 2008,**  
**Revista de Universidad y Sociedad del Conocimiento (RU&SC), Vol.5,**  
**No.1**  
**(ISSN 1698-580x)**

**Reviewed by**  
**Eren KESIM**  
**Anadolu University,**  
**Eskişehir, TURKEY**

The Economics of E-learning demonstrates a theoretical framework defined by participants of the eLene-EE (Economics of E-learning) project. The project is funded by the European Commission and aimed to produce and increase knowledge regarding the incentives to create virtual campuses. In addition, the project focused on ICT based teaching methods so that effective procedures are followed by partner universities contributing to the project, which are from Sweden, France, Spain, Italy and Poland. The project involves integrated research and development work packages each focusing on critical issues related to the economics of e-learning such as costs and benefits of e-learning, student performance of e-learning, indicators of e-learning and e-learning with references to digital divides.

The monograph is consisted of 85 pages covering an introduction followed by six articles. The coordinator, Dr. David Castillo-Merino holds a position as Assistant Lecturer at the Department of Economics and Business of the Universitat Oberta de Catalunya (UOC). Among the contributors of the monograph are leading scholars and faculty members particularly in the area of economics and business administration, pedagogical consultants and graduate students proficient in different aspects regarding the economics of e-learning and ICT integration. Findings of the project have potential to offer policy implications and help e-learning designers, learners and decision makers to improve their unique e-learning endeavors.

In the introduction, David Castillo-Merino and Mikael Sjöberg provide readers with a theoretical framework for the economics of e-learning. Profound changes in economic and business activities are addressed with a reference to the emergence of knowledge economy, and the transformation is explained through the digitalization process. The influence of the ICTs in the global knowledge economy is explained followed by a rationale regarding the diffusion and the productive use of ICTs. Changing habits and paradigms are addressed and the need to adapt to changing competitive conditions of the current century is emphasized. In this regard, the importance of educational endeavors and e-learning to sustain economic and productivity growth is justified with a reference to positive externalities of e-learning. It is suggested that e-learning production of universities is to be accompanied with higher investment in digital applications, course designs, didactic materials and professional development with a focus on labor adjustments. Universities are claimed to get financial benefits through the use of digital technologies and effective e-learning policies, if they continue to research on salubrious ICT integration models to provide high quality education. After the rationale of the framework is over, the core content work-packages of the eLene-EE project are provided.

The first article by Niklas Hanes and Sofia Lundberg addresses e-learning as a regional policy tool and provides valuable principles for social cost benefit analysis regarding net-based higher education. The analysis is supported through results from a case study analyzing a net-based nursing program in the northern part of Sweden. The program is compared to a similar campus based program. The summary of the case study is followed by a short but contributive discussion indicating that e-learning can be used successfully to achieve regional goals such as empowering specific competences in the labor market. The importance of considering different incentive structures is discussed. The study ends with a question whether it is a good policy to combine regional and educational policies to fulfill EU policy goals of regional cohesion.

The second article by David Castillo-Merino, Jordi Vilaseca-Requena, Enric Serradell-López and Natàlia Valls-Ruiz focuses on e-learning and labor market with a wage-premium analysis. It is maintained that emerging digital technologies do alter the skills requirements of occupations in several ways. These ways are provided within a framework. Costs and benefits from education are discussed followed by theoretical models to estimate the returns to education. A contributive discussion is provided on education and wages with a focus on the role of ICT in the relationship between e-learning and labor productivity. This contribution is followed by a section on e-learning skills and productivity. The section is supported with the case of degree students from Universitat Oberta de Catalunya. The results show quite interesting features in terms of the influence of schooling, experience, ICT proficiency and other personal factors on the level of wages.

The third article by Johan Lundberg, David Castillo-Merino and Mounir Dahmani reflects on some empirical findings in the literature. The authors ask whether online students perform better than face-to-face students. Methodological issues regarding the measurement of student performance and important factors influencing student success are followed by a comment on some econometric issues. The rationale of the study is supported through some empirical results followed by fruitful reflections on the current comparison. Definitive sentences regarding the online vs. face-to-face comparison are avoided, and difficulties experienced while comparing the studies are addressed. The article ends with a clear procedure for future research.

The fourth article by Adel Ben Youssef and Mounir Dahmani addresses the impact of ICT on student performance in higher education; and focuses on direct effects, indirect effects and organizational change. The paper summarizes the main findings in the economic literature addressing both studies favoring ICT for student achievement and those which do not. The authors provide complementary explanations regarding the contradictory results in the empirical literature. The discussion on the lack of organizational change in higher education is particularly interesting.

The fifth article by Thierry Garrot, Maria Psillaki and Sylvie Rochhia delves into describing e-learning development in European higher education institutions using a balanced scorecard. Using the balanced scorecard elaborated in the eLene-EE project, the authors demonstrate e-learning developments in four European cases with a reference to their stages of development, strategic choices and common aspects that could lead to e-learning evolution models for European higher education institutions.

The last article by Adel Ben Youssef and Ludovic Ragni discusses the uses of ICTs in Europe's higher education institutions with a reference to digital divides and digital trajectories. Basic dimensions of digital divides and their implications in European higher education institutions are provided.

Sources and mechanisms to bridge the divides, main problems in Europe with regard to digital divides, and the productivity paradox in European higher education are discussed. The discussion is supported through an alternative hypothesis for educational digital trajectories rather than considering educational divides. Competition strategy of universities and student attitudes toward technologies are particularly addressed.

In short, the monograph provides professionals interested in the economics of e-learning with a practical framework. The contents guide the readers with an emphasis on encouraging cost-effective e-learning practices. The application of the framework is highly analytical and detailed, which offers valuable guidelines for future implementations.

#### **BIODATA and CONTACT ADDRESSES of AUTHOR**



**Dr. Eren KESIM** is an instructor at Anadolu University, Faculty of Education. He has a B.A. in economics. His MA and PhD degrees are in Educational Sciences with emphasis on Educational Administration, Supervision, Planning and Economics. He lists his research interests as economics of education, e-learning, economics of e-learning, knowledge and technology management.

Eren KESIM, Ph.D  
Anadolu University  
Faculty of Education  
Department of Educational Sciences  
Yunusemre Campus 26470 Eskisehir, Turkey  
Tel: (90) 222 335 0580 Ext: 3397  
Fax: (90) 222 335 0573  
e-mail: [ekesim@anadolu.edu.tr](mailto:ekesim@anadolu.edu.tr)