Chapter XIX
E–QUAL: A Proposal to Measure the Quality of E–Learning Courses

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ABSTRACT

This chapter presents a method to measure the quality of e-learning courses. An introduction is first presented on the problematics of quality in e-learning emphasizing the importance of considering the learners’ needs in all the development and implementation stages. Next several projects are mentioned, which are related to quality in e-learning, and some of the most important existing models are described. Finally, a new proposal is presented, the e-Qual model, which is structured into four areas: learning contents, learning contexts, processes, and results. With this chapter, the authors aim, not only to draw the attention to this complicated issue but above all to contribute to a higher credibility of e-learning proposing a new model that stands out for its simplicity and flexibility for analyzing different pedagogical models.

INTRODUCTION

In a society where individual skills tend to become rapidly out of date, one of the greatest challenges is to discover new ways of learning that allow the learners not only to choose what and when they want to learn, but also the most appropriate learning way for their own case.

E-learning is a clear answer to this challenge. This distance-teaching model is characterised by its flexibility. Flexibility in terms of time, allowing the students to access the contents any time they want at their own rhythm. Flexibility in terms of space as students do not need to move and have the chance to attend courses anywhere in the world. Flexibility in terms of syllabus contents
because module-based plans, learning contexts, and educational strategies are used according to the student’s level of knowledge (Marques, 2004).

In the European Union, the European Parliament and the Council created the e-Learning Programme, a bi-annual programme (2004-2006) for the effective integration of information and communication technologies in education and training systems in Europe. This programme is the continuation of the e-Learning Action Plan (2001-2004), and has four action lines: promoting digital literacy, European virtual campuses, e-twinning of schools in Europe and promotion of teacher training, and transversal actions for the promotion of e-learning in Europe (European Commission, 2003).

E-learning is also integrated in the objectives of the Information Society Technologies Programme which is part of the European Union Research Framework Programme.

The Final Report Study on The e-Learning Suppliers “market” in Europe conducted on behalf of the European Commission, DG Education and Culture, estimates that in 2003/2004 the European e-learning market is 4.66 to 5.16 billion euros worth (Danish Technological Institute, 2004).

The highest-value sector is workplace learning with 3.5-4.0 billion euros. The higher education sector occupies the third position with 100 million euros (60 million in e-learning technologies and 40 million in e-learning contents and services)—a value that we believe will increase considerably, a tendency resulting from this new phase in higher education governed by the challenges of the Declaration of Bologna and lifelong learning.

Without quality e-learning there is no successful learning. According to the European Commission (2005), the good/bad/best practices need to be identified and systematized. Ehlers, Goertz, Hildebrandt, and Pawlowski (2005) corroborate this opinion, making reference to a lack of actual implementation and information on e-learning quality, for example, about specific quality approaches.

In what concerns general process-oriented approaches, we refer to International Standard ISO 9000 (ISO, 2003) as well as the total quality management (TQM) approach (Dahlgaard, Kristensen, & Khanji, 2005). Despite their recognised importance in our society, they have been revealing several usage constraints in e-learning courses (ADEIT, 2002; Ehlers, Goertz et al., 2005).

As specific approaches, we refer to those directed towards the product and the process. The first ones are more centred in industry specifications (standards) for learning objects and its main promoters are the Advanced Distributed Learning Initiative (ADL), the Aviation Industry CBT Committee (AICC), the Institute of Electrical and Electronic Engineers (IEEE), the Global Learning Consortium, Inc. (IMS), the Alliance of Remote Instructional Authoring and Distribution Networks for Europe (ARIADNE), and the Dublin Core Meta-Data Initiative (DCMI).

The second ones aim to ensure the quality of the whole process from the analysis of the requirements to its actual operation. Sustainable Environment for the Evaluation of Quality in e-Learning (SEEQUEL), Quality On the Line, Methodological Guide for the Analysis of Quality in Open and Distance Learning (Meca-ODL), Open eQuality Learning Standards, and InnoeLearning are among the most important projects.

Within these approaches, there is still the need to analyse quality from the intervening actors’ perspective: learners, producers, and distributors (ADEIT, 2002).

Another important aspect is quality from the perspective of contents and contexts. According to Figueiredo (2002), the great enthusiasts of e-learning believe that the future lies in contents. In his opinion, a significant part of that future—maybe the most significant—will not lie in the contents but in the contexts created to materialise those contents.

This chapter aims to make an analysis of quality in e-learning, to explore the problem of quality evaluation in e-learning and to present some of the main evaluation models. Finally, a model (e-Qual)