### Chapter 33

# A Conceptual Framework for E-Assessment in Higher Education:

Authenticity, Consistency, Transparency, and Practicability

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#### **ABSTRACT**

The assessment of competences requires an approach where knowledge, abilities, and attitudes are integrated, naturally implying the resource to a variety of assessment strategies. Within this context, we have seen the emergence of what has been called by several authors, the Assessment Culture. Furthermore, Higher Education e-learning environments have also promoted the use of new e-assessment strategies. Therefore, it is important to reconsider the concept of quality assessment in Higher Education online contexts, and particularly how to develop it in the present learning landscapes. In this chapter, the authors present a new conceptual framework for digital assessment in Higher Education supported by four dimensions—authenticity, consistency, transparency, and practicability—each composed by a set of criteria, aimed at promoting the quality of the assessment strategies being used. This framework was developed based on the expansion of the concept of validity supported by edumetric qualities.

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#### INTRODUCTION

Nowadays, it is demanded from Institutions of Higher Education (IHE) to integrate the complex needs of a labor market characterized by a variety of diverse contexts and contribute to the development of active and autonomous citizens and professionals. It is expected that the students will develop complex problem solving competences, strategies to cope with frequent changes and innovations, and be able to reflect about their own learning (metacognition) and so engage in a variety of contexts and situations. Moreover, in this setting, IHE are being confronted with the fast growing use Information and Communication Technologies (ICT) and the exponential development of distance education and elearning.

These challenges require not only a shift in the perceived goals of Higher Education, but also in the selection of the methodologies used, as well as a drastic change in the assessment strategies to implement in order to foster a competence-based curriculum.

In this new context, new roles are demanded from both teachers and students, where students are empowered to actively develop their knowledge and competences, and teachers are responsible for creating learning environments that nurture deep learning, anchored in real contexts. Taking into account these new contexts, "assessment will have to go beyond measuring the reproduction of knowledge" (Dierick & Dochy, 2001, p. 301) requiring the development of a new kind of assessment design. This new approach towards assessment has been labeled as an "assessment culture" (as opposed to a "testing culture") and is characterized essentially by:

- Emphasis in the integration of assessment and teaching. (Birenbaum, 1996)
- Student engagement in the development of his own assessment in a continuous dialogue with the instructor. (McConnell, 2006)
- Assessment of both the product and process of learning. (Linn, Baker & Dunbar, 1991)

- Assessment in a variety of non-standardized formats associated with experienced instructional practices. (Dierick & Dochy, 2001)
- Using assessment tasks similar to real life contexts. (Resnick, 1987; Herrington & Herrington, 1998)
- Complex challenges and an emphasis on research. (Gulikers, Bastiaens, & Kirchner, 2004)
- Supporting student reflection about their learning. (McConnell, 2006)
- Valuing qualitative feedback over a bland quantitative classification. (Birenbaum, 1996)

Dierick and Dochy (2001) discussed this new assessment culture through the analysis of several assessment strategies (portfolios, OverAll tests, and assessments in which students have a role) supported by an edumetric perspective of assessment. According to these authors, the current societal and technological contexts require education to change, stressing that "the explicit objective is to interweave assessment and instruction in order to improve education" (p. 321).

In this chapter, we start by discussing the concepts of competence, assessment culture, and edumetrics, as well as the changes introduced by technology into assessment. Moving forward we clarify the concept of e-assessment, introduce the new concept of alternative digital assessment and present a new conceptual framework for e-assessment in Higher Education. This conceptual framework introduces a set of four quality dimensions and fifteen criteria for the development and use of e-assessment in Higher Education virtual environments supported by the discussed edumetric qualities.

#### **BACKGROUND**

With the development of new ICT and the emergence of Web 2.0, teaching and learning resources are moving ever more to new technologically en-

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