

## Chapter 33

# Assessing Learning with Web 2.0 Tools: Lessons Learned from a Portuguese Initiative

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### ABSTRACT

*The emergence of new skills to better fit the networked information economy presses higher education institutions to invest in digitally rich environments that allow learning to be personalized, taking place in multiple locations and at time that suits the learner. Social Web tools prioritize collaboration, participation, and reflection, offer new opportunities for knowledge construction and sharing, but they also demand new pedagogical strategies and assessment methods that are not consistent with standards that value what is taught instead of what is constructed, what is pre-established instead of what is democratically agreed. In this chapter, the author presents the results of a research project where different Web 2.0 technologies were used as tools for assessing learning in teacher education programs at the University of Minho, Braga, Portugal between 2006 and 2012. In order to provide rationale for embracing Web 2.0 tools as well as recommend alternative methods to create, capture, and assess learning outcomes that result from the integration of authoring tools in teaching and learning activities, the authors discuss the evidence obtained and reflect on the affordances and challenges of setting up authentic tasks that engage students in the learning process and that provide inferences to assess learning outcomes.*

### 1. CONTEXT

Web 2.0 tools can be defined as “social Web technologies that enable communication, collaboration, participation and sharing” (JISC, 2009, p. 5). They allow any web user to create and publish contents and so they are authoring

tools with innumerable potentialities for teaching and learning. In fact, with Web 2.0 tools both teachers and students can perform a multiplicity of activities related to teaching and learning. For teachers’ Web 2.0 tools offer opportunities for designing instruction in a wide range of media formats, for creating contents and leaving them

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available and accessible at any time and from anywhere, for communicating with students, for creating innovative learner centered instructional methods, “Driven by process rather than content, such an approach helps students become self-directed and independent learners. Web 2.0 is well suited to serving and supporting this type of learning.” (JISC, 2009, p. 7). For students’ it is an opportunity to create and share contents both individually or in a collaborative way with the instructor and colleagues, and the global world in a logic that is consistent with the “communal constructivism” defended by Ramos et al. (2003).

However, as referred by several authors (Gray et al., 2009, 2011), there is no consistency in the multiplicity of contexts those activities are conducted and assessed in higher education (HE) institutions; according to Melville et al. (2009, p.7), although “Web 2.0 technologies are being deployed across a broad spectrum of university activities (...), deployment is in no way systematic and the drive is principally bottom up, coming from the professional interest and enthusiasm of individual members of staff”. On the other hand, as commented by Gray et al. (2009, p. 2), the assessment of students’ authoring with Web 2.0 tools “in many cases it is offered chiefly as a preliminary to core assessable work, for optional enrichment or for low-stakes assessment”. And the authors bring to the discussion issues of academic standards derived from the use of non-purposeful assessment like “setting superficial tasks, requiring ephemeral forms of work for educational credit, accepting work that is without academic rigor or claiming exaggerated learning outcomes from such work could backfire on those who hope to tap educational potential of Web 2.0 authoring” (Gray et al., 2009, p. 2).

Good practices of social web authoring strategies in teaching and learning contexts, either face to face or online, are needed, as existing research is scarce and needs systematization. This is the main goal of this study as a contribution to the state of the art: to report and reflect on lessons learned

in the implementation of learning activities that involve the use of Web 2.0 tools in teacher training both at pre service and in service courses at the Institute of Education, University of Minho, Portugal, between 2006 and 2012. Social web tools were used for hands on activities, as authoring tools, and so both the artifacts created and the process of its development give the instructor evidences to assess learning outcomes in a more democratic and authentic fashion that will be reported in this article.

The text is structured into five sections. After this Contextualisation, a review of literature on online assessment techniques will be presented, emphasizing opportunities and challenges that the inclusion of social web tools in the teaching and learning process raise for assessing students outcomes. In part three we address lessons learned from a projet that was carried out in teacher education programs of a Portuguese university with web social authoring tools. We proceed with Discussion and finish with Conclusions and Future Work.

## **2. ASSESSING LEARNING IN THE SOCIAL WEB: OPPORTUNITIES AND CHALLENGES**

Assessment is central for any educational system because it directs learning and may be used to indicate to students which aspects of their learning are valued and will be rewarded (Anderson, 2004). Considering the multiplicity of assessment methodologies available in the literature (Cardoso et al., 2003), for this particular research that involved only adult learners, we consider Erwin’ (1991) definition for assessment as “the systematic basis for making inferences about the learning and development of students. More specifically, assessment is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students’ learning and development” (Erwin, 1991, p.14).

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