Web 2.0: Challenges and Opportunities for Assessing Learning in Teacher Education Programs

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ABSTRACT

In this article, the author presents the results of a project where different Web 2.0 technologies were used as tools for assessing learning in education programs at the University of Minho, Braga, Portugal. 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, as well as offer new opportunities for knowledge construction and sharing. But they also demand new pedagogical strategies and forms of assessment that are not consistent with standards that value what is taught instead of what is constructed, what is pre-established instead of what is agreed. To provide rationale for embracing Web 2.0 tools as well as point out forms to create, capture, and assess evidence that results from the integration of such tools in learning and teaching, the author describes sixteen pedagogical experiences and reflects on the affordances and challenges of setting up authentic tasks that engage students in the learning process and embracing digital evidence in different formats for assessing learning outcomes.

Keywords: Assessment, Social Web, Teacher Education, Technologies, Web 2.0

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 as referred by Ivanova and Ivanova (2009): “The Web 2.0 proposes a flexible environment for authors where they can be creative and innovative persons, participating in social, creating and spreading knowledge in collaborative way, taking advantages of others’ wisdom” (p. 8).

It was expectable that such potentialities should be explored for teaching and learning, and so, since 2004, in the Portuguese educational system as well as worldwide, the number of teachers who adhered to the use of the social web tools in the classroom grew in an exponential way (Coutinho, 2008).

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 available and accessible at any time and from anywhere, for communicating with students, for creat-
ing 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” as defended by Ramos et al. (2003).

However, as referred by several authors (Gray et al., 2009, p. 7), 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., 2010, p. 2).

Good practices examples of social web authoring strategies in online learning environments are needed and this is the main goal of the present article: to report and reflect on our own experience in the development of activities that involve the use of Web 2.0 tools for class work and assessment of learning outcomes carried out with pre-service, in-service and post-graduate teachers who attended programs at the Institute of Education, University of Minho, Portugal, between 2006 and 2011.

2. ASSESSING LEARNING WITH WEB 2.0 TOOLS

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’s (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).

To assess learning outcomes is always a hard work both in face-to-face and in online education, particularly when we face evaluation as a formative process that focus more in the process than in the products/artifacts presented (Gomes, 2008), that aims to promote self-learning and autonomy (Coutinho et al., 2009) and values feedback and communication as conditions for success (Anderson, 2004). However, the use of Web 2.0 tools to assess online learning brings additional contours to the process: a myriad of new opportunities and challenges emerge in the pedagogical scenario as will be discussed in the next paragraphs.

2.1. Opportunities

Regarding opportunities, we know from research on assessment “that timely, detailed feedback provided as near in time as possible to the performance of the assessed behavior is most effective in providing motivation and in shaping behavior and mental constructs” (Anderson, 2004, p. 281). In this particular, Web 2.0 offer innumerous advantages: the added possibilities for communication and
Future Identities of the Self Among Learners Across Physical and Virtual Spaces
Themba M. Ngwenya (2017). Integrating an Awareness of Selfhood and Society into Virtual Learning (pp. 257-278).
www.igi-global.com/chapter/future-identities-of-the-self-among-learners-across-physical-and-virtual-spaces/174821?camid=4v1a

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