An E-Learning Web 2.0 Experience at the University

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ABSTRACT

This contribution focuses on an experience of e-learning Web 2.0 realized at the University of Milano-Bicocca (Milano, Italy) in the 2011-2012 Academic Year. In this experience the authors used Thinktag Smart, a new e-learning Web 2.0 platform, to train 137 students of the University of Milano-Bicocca. All participants had done e-learning before and had an Internet connection in their homes. At the end of the experience the authors evaluated the learning experience and the learning platform using an evaluative questionnaire given to the students who took part in the experience. After an introduction to Web 2.0 and e-learning 2.0, this paper will deal with this learning experience and its results.

Keywords: E-learning 2.0, Learning, Platform, University, Web 2.0

1. FROM WEB 2.0 TO E-LEARNING 2.0

The information and communication technologies (ICTs), as several projects have revealed over the last few years at the worldwide level, have become an essential part of the learning experience for people of all ages (Diamantini & Pieri, 2008; Pieri & Diamantini, 2009; Szucs, Tait, Vidal & Bernath, 2013). Currently possibilities for applications of the Web 2.0 in the learning environment are beginning to be explored (Benedek & Molnár, 2011; Wang, Love, Klin, Kim & Davis, 2012) worldwide. “To prepare students for the knowledge economy of the 21st century, schools must provide students with purposeful access to ICT that increases their participation, engagement and achievement in education” (DEECD, 2011, p. 3).

The term Web 2.0 was created in 2004 by Tim O’Reilly and Dale Dougherty from O’Reilly Media, an American publisher specialized in publications concerning the new technologies and networks. The term Web 2.0 refers to the so-called second generation Internet services such as, for example, blogs, Google (not only as a search engine, but also as an instrument for document sharing, googledoc, and to communicate, gmail), skype, facebook, flickr, youtube and wiki. The Web 2.0 is easy to use, such as social networking websites, wiki and communication instruments which emphasize collaboration and sharing among users. In fact, the Web 2.0, not only allows for content sharing, collaboration and communication among users, but also lets users, even those with little experience with ICTs, to produce contents. The use of Web 2.0 in learning environments allows all the actors involved (teachers and students) to actively participate in the learning process, giving them the possibility to generate and propose contents, to stimulate discussions and

DOI: 10.4018/ijdldc.2014010101
in general, to create real learning communities (Barak et al., 2009; Jones et al., 2010). Referring to Web 2.0 technologies used as tools in learning such as social networking, wikis and microblogging, Terras and Ramsay claim that they “blur the boundaries between formal and informal learning environments (e.g., opportunistic, non-facilitated, non-class based and entirely learner driven) and become an integral part of the process of learning and teaching” (2012, p. 820).

With the introduction of the ICTs in education, over the years many changes of extreme importance have taken place; before the teacher was the key figure for the student, starting from a rigid hierarchical teacher-student model to one now in which the contribution of all participants, teacher and students is valued. This goes from a systematic order which is linear and sequential to a hypermediatic disorder, from the transmission of knowledge according to a behaviorist or cognitive model or the production of knowledge according to a constructivist model. On one hand, the individual has a more active role; on the other hand, the possibilities and the need to choose and personalize learning paths and experiences grow. Every individual with his personal characteristics tends more and more to construct a personal learning environment which interacts with an ever growing number of technologies and social networks. As has happened in the passage from the “traditional” face to face learning to distance learning, today the passage from “traditional” distance learning to that of “2.0” is beginning to take place. The introduction of the last generation of ICTs in education is tied, on one hand, to the characteristics of students today, the Net Gens (Howe & Strauss, 2003; Oblinger & Oblinger, 2005; Murphy & Smark, 2006; Pieri, 2008; Pieri & Diamantini, 2011; Law, 2013); while on the other hand, to the ever growing need for lifelong learning, which is available “every time and everywhere” for people who have already finished their formal education but who need to continuously update and increase their knowledge, abilities and competences. ICTs in lifelong learning since their arrival in education, have played a fundamental role (Pieri & Diamantini, 2008).

The term e-learning 2.0 (Karrer, 2006a; 2006b) is a neologism for computer-supported collaborative learning (CSCL, Dillenbourg, 1999; Scardamalia & Bereiter, 1994; Zurita & Nussbaum, 2004; Ligorio & Veermans, 2005; Stahl & Hesse, 2009; Fischer, Kollar, Stegmann & Wecker, 2013) systems that emerged during the emergence of Web 2.0 (Downes, 2005; Hargadon, 2008). From an e-learning 2.0 viewpoint, conventional e-learning systems were based on instructional packets, which were delivered to students using assignments. Assignments were evaluated by the teacher. On the contrary, the new e-learning places increased emphasis on social learning and use of social software, such as wikis and virtual worlds (Redecker et al., 2009). E-learning 2.0, in opposition to e-learning systems not based on CSCL, intends knowledge (as meaning and understanding) to be socially constructed. As underlined by Wang, Love, Klinc, Kim and Davis (2012) the theoretical framework for e-learning 2.0 is drawn from social constructivism; it is believed that students learn as they work, to understand their experiences and create meaning. In this case, teachers are knowers who craft a curriculum to support a self-directed, collaborative search for meanings (Siemens, 2005). Social constructivism forms an integral part of the Web 2.0-based social process, as students proactively interact with one another to gain knowledge (Spady, 2001). Learning takes place through conversations about content and grounded interaction about actions and problems. Supporters of social learning claim that one of the best methods to learn something is to teach it to others. There is also an increased use of virtual classrooms as an online learning platform and classroom for a diverse set of education providers. In addition, as underlined by Dunlap and Lowenthal (2009), social networks have become an important part of e-learning 2.0 to virtual classroom environments. Social networks, now part of the everyday life of our students (Jones & Fox 2009; Facebook, 2012; Prescott, Wilson & Becket, 2013), have been used to foster online learning.
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