Chapter 3.8

Web 2.0 Technologies:
Social Software Applied to Higher Education and Adult Learning

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ABSTRACT

Web 2.0 technologies are playing an important role in building social capital through increasing flows of information, and building on knowledge and human capacity of learning. The purpose of this chapter is to show the role that social software, a component of Web 2.0 technologies, can play in higher education and adult learning. This chapter focuses on the role of Web 2.0 technologies in promoting learning. New learning paradigms and pedagogical applications are also discussed.

INTRODUCTION

Education has traditionally been conducted face-to-face, with professors performing outstanding magisterial classes in front of the learners. During the centuries, students and professors have shared the same time and same space frame. Nowadays, things are quite different. Information technology (IT) is a reality affecting the whole education system from primary school to higher education and adult learning. IT is having a considerable impact on the learning providers, on the learning process itself and, of course, on any agent involved in the process.

History has demonstrated that technology affects education profoundly. Considering the definition of technology broadly, one may say that prehistoric people used primitive technologies to teach skills to their young (Frick, 1991). Whenever a new medium entered the picture, a new wave of educational delivery arrived. Radio, television, and now computers have all impacted the field of distance education. Though some studies (see Russell, 1999) report no significant differences in performance between face-to-face instruction and technology supported environments.

Nowadays, campuses are networked, faculty post their notes on Web pages, students access the library from their rooms, and entire classes can have discussions via chat software (Rice-Lively, 2000). This development has recently come to be labeled under the by now commonly accepted term e-learning (Hudson, 2003).

The European e-Learning Action Plan 2001 (European Commission, 2001) defines e-learning as the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration. This requires new e-interaction and e-communication competencies and a reorganization of e-learning structures. Components can include content delivery in multiple formats, management of the learning, and a networked community of learners (Gunasekaran, McNeil, & Shaul, 2002). Internet/World Wide Web have meant that opportunities have been identified for developing distance learning activity into a more advanced online environment. It is known as Virtual Learning Environment (VLE), which eliminate geographical barriers while providing increased convenience, flexibility, individualized learning, and feedback over traditional classroom (Kiser, 1999). Higher education institutions devote substantial resources to providing students with access to internet-based information, VLEs

and other forms of e-learning. These efforts are predicated upon an assumption that "university students are inherently inclined towards using the internet as a source of information within their day-to-day lives and, it follows, disposed towards academic use of the internet" (Selwyn, 2008, p. 12).

But, today, the traditional approach to e-learning is currently changing from the use of Virtual Learning Environment (VLE) to e-learning 2.0, an approach that combines the use of complementary tools and Web services -such as blogs, wikis, trackback, podcasting, videoblogs, and other social networking tools- to support the creation of ad-hoc learning communities. In this context, most of the current research tends to be concerned with the potential of the worldwide Web and other internet applications to accelerate university students' learning and knowledge-building, and support interactivity, interaction and collaboration (Selwyn, 2008).

This proposal aims to provide an introductory perspective on the learning impacts of new media and Web 2.0 information and communication technologies on the e-learning environment. Web 2.0 technologies are playing a crucial role in building of social capital through increasing flows of information, and building on knowledge and human capacity for learning. Social software has emerged as a major component of the Web 2.0 technology movement. But, how can social software play a role in higher education and adult learning? To answer this question, this proposal will focus on the role of Web 2.0 technologies in promoting learning. Pedagogical applications, which stem from their affordance of collaborative knowledge discovery, will be discussed. At the same time the chapter will also explore the pedagogical methodology involved considering that e-learning Web 2.0 leads us from constructivism to navigationism. Finally, some suggestions are made for future research in this field.

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