

Chapter 12

Effective Virtual Learning Environment through the Use of Web 2.0 Tools

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ABSTRACT

The use of social networking sites and Web 2.0 tools is increasing. Research shows that education via Web 2.0 tools increases students' motivation and their interest in the learning. Therefore, a teaching environment can be created using social networking sites in which Web 2.0 tools allow effective learning. In this chapter, some of the Web 2.0 tools available for effective virtual learning environment creation are examined. Suggestions are provided regarding possible uses of tools such as Classmint, Pinterest, Voki, Screenleap, Pageflip-flap, Youtube, Prezi, Secondlife, Animoto, Sketchfu, and Quizrevolution, and their positive effects on students.

INTRODUCTION

Tablets, smart phones, the Internet and other technologies are increasingly being used in the development of education. Historically, Distance Education has gone through similar periods of development with the use of a variety of communication tools. This development started with physical mailing methods and has continued through the Information Communication Technologies that are being used currently (Newby, Cutright, Barrios & Xu, 2006; Passarini & Granger, 2000). These modern tools include: printed materials, radio, voice tapes, video tapes, television, telephone,

fax, video conference, teleconference, computer, the Internet, and e-mail (Koçer, 2001). As these technologies and communication tools have developed, intercontinental sound and video transfers have become simpler and more immediate. The first application of distance education appeared in the second half of 1800s (Tsinakos, 2003); however, the term was only catalogued by Wisconsin University in 1892. In 1906, it was used in a publication by William Lighty, the director of a university (Kaya, 2004).

Despite this extensive history, the term 'distance education' has many definitions. Aşkar (2003) defined distance education as "education

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that is created through some communication technology tools for student, teacher and materials in different places” (Moore & Kearsly, 1996). Briefly, distance education can be defined as teacher(s) and student(s) in different locations practicing their planned teaching-learning activities through communication technologies (Almogbel, 2002; Scott, 2003; Genç, 2004). Examination of historical distance education programmes show that methods show initial use of mailing, then one-way sound transfer following the invention of radio. In the 1950s, one-way video transfer began to be used as a method after television became widespread in daily life. In 1968 the British Open University was developed as an alternative to traditional education paradigms, and has since served as a model for similar programmes. In 1970s and 1980s newly-developed cable television, closed-circuit television and video conferencing technologies were incorporated into distance education programmes.

Most recently, the rapid improvements in Web technologies have helped to develop Web 2.0 tools and increased their day-to-day use around the world. As a result, resources are required to inform teachers about the Web tools available to them and how they may be used. Many studies have shown that lessons conducted using Web 2.0 tools increase students’ motivation and success (Bicen & Uzunboylu, 2013; Cochrane & Bateman, 2010; Hoffman, 2009). This section of this book, Web-based education and the development of Web 2.0 technologies are discussed.

Online Learning

According to Tapanes, Smith and White (2009), online learning technologies increase interpersonal communication and sharing applications through the Internet, irrespective of the distance between participants. ‘Online learning’ – also known as Web based, Internet based or online learning - is a teaching model that can be carried out over the Internet (Usta, 2007). In online

learning, students are able to access educational materials on demand and can be informed about updates instantly.

Chuang and Tsai (2005) stated that online interaction had peaked in the preceding years. In particular, online learning environments have become indispensable for students. Internet usage in distance education provides more advantageous environments for implementing constructivist learning theory (Passerini & Granger, 2000). Allen et al., (2007) emphasized that four model can be used in education: traditional learning, Web based learning, blended learning and online learning.

WEB 1.0 AND WEB 2.0

Nowadays, rapid development and spreading of developments allow Web technologies to be used and improved rapidly and effectively. As a result, Internet users were first able to use Web 2.0 and associated tools in 2004 (O’Reilly Media, 2005). Garcia, Rey, Ferreira and Puerto (2007) have specified the differences between Web 1.0 and Web 2.0 (Table 1). During the era of Web 1.0, users could only read information, share personal information, consume information rather than producing it. Also, passively visiting only the pages they know, students keep information that they learned to themselves due to a lack of sharing opportunities, maintain to content based information and the use of one-way communication.

Web 2.0 users, in contrast, were able to experience a participative Internet environment. Internet users were suddenly able to access blogs, wikis and social networking sites. They had the opportunity to design pages within a site for themselves and to create their own profile pages. After only having a chance to read published pages in the period of Web 1.0, Web 2.0 users had the opportunity to read pages with Web 2.0, design profiles for themselves and share pages through these profiles (McLoughlin & Lee, 2007). As a

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