Chapter 21
The Use of Social Interaction Technologies in E-Portfolios

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ABSTRACT

The chapter focuses on the potential of electronic portfolios (e-portfolios) to engage and motivate the learners and presents a framework for the informed inclusion and adoption of social interaction technologies as a means to increase the effective use of e-portfolios. Electronic portfolios are a Web-based format for providing genuine evidence of student performance, self-reflection, competence, career planning and leadership. The e-portfolios meet the needs of the digital learner in the knowledge society. The collaboratively constructed artifacts enable the articulation of shared knowledge building and self-reflective practice, further confirming the status of e-portfolios as living documents. By their electronic nature, e-portfolios open promising opportunities for the assimilation of social interaction technologies such as blogs, wikis, podcasts, video, and photo sharing. The authors trace the development and use of e-portfolios within the context of higher education. Various e-portfolio tools are discussed along with their educational potential and the associated challenges.

INTRODUCTION

A significant body of research exists that identifies electronic portfolios (*e-portfolios*) as a first-rate tool for providing genuine evidence of performance, self-reflection, competence and leadership in students. The collaboratively constructed artifacts enable the articulation of shared knowledge building and self-reflective practice, further confirming the status of e-portfolios as living documents. e-portfolios, by their electronic nature, open promising opportunities for the integration of various social interaction technologies, such as blogs, wikis, podcasts, video, photo sharing, and others.

The chapter focuses on the potential of social interaction technologies to engage and motivate

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learners to extend their participation in the e-portfolio process and so enable them to document lifelong learning capabilities as well as promote deeper learning (Tosh & Werdmuller, 2004). The authors trace the history, development and use of e-portfolios within the higher education context. Theoretical frameworks and educational potential are addressed along with the associated developmental challenges including individual commitment and engagement, deep learning and reflection, and assessment. The theories of "constructivism" and "connectivism" (Siemens, 2004) that underpin the adoption of social interaction technologies are reexamined. Finally the chapter concludes with arguments for the informed inclusion of social interaction technologies as a means to address factors currently impeding the effective use of e-portfolios.

BACKGROUND

The use of e-portfolios in higher education is preceded by the traditional use of paper-based portfolios. Portfolios have had a long history as the showcase tools of artists, whereby they contained completed pieces of work to demonstrate skills and talent. Since this time portfolios have been widely used in a variety of disciplines, particularly in the field of education. The extensive use of paper-based portfolios in education (Tomkinson, 1997) has informed the transition to electronic portfolios, also known as e-portfolios.

In the U.S. and Western European education and training, extensive resources have been allocated to assist in a system-wide adoption of e-portfolios. Portfolios are being increasingly used as a career advancement tool (Redish, Webb, & Jiang, 2006). In Europe, The Centre for Recording Achievement in the United Kingdom (Beetham, 2006) and the European Institute for eLearning (The Higher Education Academy, 2005) are promoting the use of Personal Development Plans whereby each individual has a personal electronic portfolio that contains "evidence of an individual's achievements over a lifetime of learning and employment." In the teacher education sector, for example, some graduates in the United States are required to demonstrate mandated National Standards prior to being granted teacher registration (Ma & Rada, 2005). With the introduction of Teacher Registration Boards and other accreditation bodies in all Australian States, it appears that Australia is moving in the same direction.

In its simplest form, an e-portfolio is a collection of evidence that reflects a learner's progress, development and achievement over time. Depending on the discipline, the e-portfolio usually contains education history, certificates, work-samples, awards, personal values, interests, photos, videos, observation, feedback from supervisors/peers, evaluations, and—importantly— reflections on each piece of evidence. The reflective comments highlight the reason for selection and the learning that occurred. These reflective processes and comments are the key to an e-portfolio. It is through this reflective process that the learner is provided with "learning spaces where he or she "can gain insights and a better understanding of him/herself as a learner" (Greenberg, 2003, p.12).

The expansion of the World Wide Web has considerably transformed the potential of e-portfolio. The graphical nature of the web and ability to link digital artifacts has revolutionized how information is located and reviewed. Web technologies now allow authors to seamlessly integrate text with graphics, audio and video. This visual capacity provides additional options for showcasing the authors' accomplishments. Importantly, the linking mechanism of the web allows for tight integration between the elements of a portfolio and adds opportunity to connect the portfolio to the whole world.

According to Siemens (2004), the growth of e-portfolios has been "fuelled by three broad factors: the dynamics of functioning in a knowledge economy, the changing nature of learning, and the changing needs of the learner." In a knowledge