Chapter XII
Using ePortfolios to Foster Peer Assessment, Critical Thinking, and Collaboration

Heidi J. Stevenson
University of the Pacific, USA

ABSTRACT
An ePortfolio is frequently seen as a space for electronically compiling and storing student work. After completing assignments, students generally submit their ePortfolio to an instructor, prospective employer, or other assessor. This chapter questions if the typical use of ePortfolios could be modified to create opportunities to encourage students (elementary school through graduate school) to engage in critical thinking, provide feedback to their peers, and/or other opportunities to contribute to the learning process.

INTRODUCTION
In this chapter a model for computer-mediated anonymous peer assessment of ePortfolios is described in which students review each other’s work and provide feedback electronically. This model results in increased opportunities for students to develop reflective and critical thinking skills, the ability to evaluate and provide thoughtful responses to different points of view, and techniques they can use to encourage and support the work of other students.

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REVIEW OF RESEARCH ON EPORTFOLIOS

The use of paper portfolios for assessment in education began in the 1980s primarily in college writing classes to address the need for more effective assessment and accountability measures in higher education (Belanoff, Elbow, & Fontaine, 1991, in Barnett, 2005). The practice of using portfolios was also implemented in K-12 classrooms, in response to high-stakes testing. K-12 schools used portfolios as a medium for students to showcase skills that could not be measured by standardized forms of assessment. Recently, universities have begun to explore numerous options for the use of the electronic version of portfolios.

Initially, each student had one portfolio serving the purpose of showcasing student work over time. The students collected examples of their work (sometimes referred to as artifacts), then they ideally reflected on their learning process, and afterwards provided their portfolio to an instructor, institution, or employer for evaluation. This process was restricted to a fairly small audience and provided limited opportunities to enhance the learning process.

With the advent of the electronic portfolio and the ease in which it may be presented to multiple audiences, the ePortfolio requirements began to serve many purposes that sometimes conflicted. Barnett (2005) observes that there are philosophical differences (e.g., constructivist and positivist) in the goals and purposes related to ePortfolios, and points to the need for a student to have more than one portfolio to address the requirements of varied content and objectives.

Greenberg (2004) refers to three different types of ePortfolios addressing various goals, including: (1) the showcase ePortfolio, which is generally designed to show work to future employers and usually entails the organization of materials after the work has been created; (2) a structured ePortfolio, which is typically created in response to standardized expectations, and therefore the organization meets predefined expectations for work that has yet to be created (e.g., ePortfolios used for the licensing of instructors); and (3) a learning ePortfolio provides students with the opportunity to tell the story of their learning (Barnett, 2005), and the organization evolves as the work is created (Greenburg, 2004).

There are currently no standardized terms associated with the various types of ePortfolios. The ePortConsortium (2003) and Barnett (2005) make reference to ePortfolios with similar characteristics, but use alternative terminology. The current chapter will use the terminology and definitions associated with the three types of ePortfolios as outlined by Greenberg (2004).

REVIEW OF RESEARCH ON PEER REVIEW

Vygotsky (1978) states that people learn by making meaning through their social dialogue and interactions with their environment. Peer