Chapter 4.20

It Was Hard Work, but It Was Worth It:
ePortfolios in Teacher Education

Andrea Bartlett,
University of Hawaii at Manoa, USA

ABSTRACT

Student ePortfolios offer both advantages and challenges for teacher educators. The purpose of this case study is to identify benefits that make the effort worthwhile. Two groups of pre-service teachers—one undergraduate and one graduate—created complex ePortfolios under the direction of a non-technology faculty member. Faculty observations and student evaluations revealed ePortfolios enhance students' educational technology learning, reflection, and collaboration. The author concludes creating ePortfolios was "worth it," and she provides recommendations for making ePortfolios even more valuable for pre-service teachers, their programs, and the schools in which they will someday teach.

INTRODUCTION

Portfolio proponents assert that engaging in portfolio development is linked to self-reflection and the possibility of improved practice; however, few researchers have examined what that involvement has meant for pre-service teachers. (Delandshire & Arens, 2003, p. 58)

In contrast to many other professions, portfolios have been used to assess teaching for only the past 25 years, and electronic portfolios are an even more recent development. Teaching portfolios have been found to provide many benefits, including: (a) a richer, more contextualized view of teaching than standardized tests (Shulman, 1998); (b) enhanced reflection by teachers

on their own (McLaughlin & Vogt, 1996; Valli & Rennert-Ariev, 2002) and students' learning (Fetter, 2003); (c) experience collaborating with peers (Wolf, Whinery, & Hagerty, 1995); and (d) a record of accomplishments for job searches and certification (e.g., Interstate New Teacher Assessment and Support Consortium, National Board of Professional Teaching Standards). Portfolio assessment also contributes to the professionalization of teaching by giving teachers responsibility for their own evaluation (Lyons, 1998a).

The use of multimedia to create ePortfolios provides additional benefits beyond those of traditional paper-based portfolios, such as linking artifacts to teaching standards. This interconnectivity is likely to result in teachers' greater understanding of themselves and the standards, when compared to paper-based portfolios (Norton-Meier, 2003). ePortfolios are also easier to update, store, and share than traditional portfolios. Another important benefit is that pre-service teachers who create ePortfolios learn about technology (Bartlett, 2002). Since ePortfolios may span the teacher education program, they provide an effective vehicle for integrating technology into the teacher education program (Bartlett, 2002) and make it more likely pre-service teachers will implement technology in their classrooms (Goldsby & Fazal, 2000; McKinney, 1998).

While there are substantial advantages, portfolios also present challenges for educators and institutions. Teacher educators who use ePortfolios, in particular, face many hurdles allocating the time, resources, and support necessary to complete a technology-oriented project (e.g., McKinney, 1998; Milman, 1999). Other potential pitfalls include failing to communicate evolving guidelines (Lamson, Thomas, Aldrich, & King, 2001) and focusing on the "bells and whistles" of technology rather than creators' goals (Lieberman & Rueter, 1997).

This chapter is a case study encompassing four years of successful ePortfolio implementation by a teacher educator who began the project with limited technology skills. Two groups of pre-service teachers—undergraduate and masters' students—created complex, standards-based, multimedia portfolios during their two-year programs. Students' perceptions, collected during teacher education and after four months of full-time teaching, are also reported.

Zeichner and Wray (2001) explained the value of such case studies: "It makes little sense to talk about the consequences of using teaching portfolios in general, without an understanding of the particular conditions under which they are constructed and the purposes toward which they are directed" (p. 619). Therefore, the purposes of the chapter are to explain the particular conditions and purposes under which our ePortfolios were created, and to determine whether the implementation was worthwhile through a critical evaluation of successes, problems encountered, and recommended solutions.

BACKGROUND

As a faculty member in Curriculum Studies, rather than technology, I began exploring ePortfolios shortly after receiving tenure. One of my professional roles was coordinator for groups of approximately 25 students as they progressed through their two-year teacher education programs. ePortfolios caught my interest because they appeared to offer the benefits of traditional portfolios, plus the advantages afforded by technology.

After reviewing the literature on portfolios, I decided to go forward, even though I had little idea of what ePortfolios looked like or how I would accomplish my goal. I hoped ePortfolios would benefit my teacher education students, serve as effective performance assessment, and become my new research agenda. Since I had limited technology skills, the technical support