Creating an Electronic Student Teaching Portfolio

Patricia A. Shaw
University of Wisconsin-Stevens Point, USA

Susan Slick
University of Wisconsin-Stevens Point, USA

INTRODUCTION

Over time, student and teacher portfolios have taken several forms for a variety of purposes. Initially, portfolios were created in many educational settings to document learning. Portfolios were used as one means of assessment in course work or for senior graduation exhibitions. As calls for educational reform continued to be heard in forums ranging from local school board offices to the Oval Office, teacher accountability has become an issue of paramount importance. Parents and politicians alike want assurance that the most competent teachers are providing quality educational experiences for students. Thus, teacher assessment has become a "hot" political topic throughout our country.

MAIN FOCUS: ELECTRONIC PORTFOLIOS FOR NEW TEACHERS

The use of electronic portfolios in teacher education is growing dramatically. For the past five years, the conference proceedings of the Society of Information Technology in Teacher Education showed an average of 45 presentations under the topic of *Electronic Portfolios*. In addition, the commercial sector has discovered potential opportunities to support electronic portfolios for teacher education. According to Barrett and Knezek (2003), there are more than a dozen commercial providers offering electronic portfolio services.

In the last eight years, across America, teacher education programs have required that student teachers create portfolios as evaluation instruments to address the often mandated *INTASC* (Interstate New Teacher Assessment and Support Consortium, 1987) *Principles* required of all education majors prior to obtaining teacher certification and licenses.

Dr. Helen Barrett (2003) defines a portfolio "as a purposeful collection of [teacher] work that illustrates efforts, progress, and achievement in one or more areas over time" (paragraph 3). This selective collection of teacher work and evidence of development and progress is gathered across diverse contexts over time and is grounded in critical reflection of one's teaching practice and professional growth. Its aim is to create a contextual view of a teacher's work. For assessment purposes, teacher portfolios are often framed by requirements such as the need to show competence in state educational teaching standards and university specific performance tasks.

The benefits of teacher portfolios in general include: making the invisible practices of teachers visible, enhancing teaching practices, promoting self-reflection, and authentic assessment. Portfolios have created opportunities for meaning-making and ownership of learning, and provided a venue for self-definition. DiMarco writes: "Web portfolios are important as vehicles for lifelong learning, assessment and marketability and they are challenging students and faculty to respond to the demands of societal web portfolio integration" (DiMarco, 2006, p. 5).

This article describes the characteristics, processes, construction, and audiences of student teacher portfolios. In addition, the chapter highlights specific traits of electronic portfolios and implications for the future.

Characteristics of Portfolios

Student teacher portfolios are often created in one of two forms, hard copy or electronic. Electronic portfolios are often referred to with other synonymous terminology: "e-folios, digital portfolios, Web-based portfolios or Web folios, multimedia portfolios, and electronically-augmented portfolios" (Kilbane & Milman, 2003, p. 7). Within the last eight years, the electronic portfolio has

become a popular, efficient way to provide evidence of teacher competence. Electronic teaching portfolios are unique because the use of technology allows the portfolio developer to collect and organize portfolio *artifacts* in a variety of media types (audio, video, graphics, and text), allowing for the contents to be displayed and manipulated in ways not possible in a binder portfolio. Kilbane and Milman (2003) outline a number of advantages of electronic portfolios over the traditional hard copy or binder-type portfolios including "accessibility, portability, and creativity" (pp.8-10). For a more comprehensive comparison of hard copy and electronic portfolios, see Table 1.

Process

The process of developing an electronic student teacher portfolio is evolutionary, ongoing and recursive. Several models (Burke, Fogharty & Belgrad, 1994; Campbell, Cignetti, Melenyzer, Nettles, & Wyman, 2004; Danielson & Abrutyn, 1997, Slick, 1997) exist which outline the portfolio process. Within the literature devoted to the portfolio developmental process, descriptors may vary. For example, Fogarty, Burke, and Belgrad (1994, 1996 in Barrett, 1999, p. 2) propose ten processes for portfolio development:

1. PROJECT purposes and uses
2. COLLECT and organize
3. SELECT valued artifacts
4. INTERJECT personality
5. REFLECT metacognitively
6. INSPECT and self-assess goals
7. PERFECT evaluate and grade
8. CONNECT and conference
9. INJECT AND EJECT to update
10. RESPECT accomplishments and show pride

In another model, Campbell, Cignetti, Melenyzer, Nettles, and Wyman (2004, pp. 22-26) describe the portfolio development process in four stages briefly described below:

Table 1. Comparison of Hard Copy and Electronic Portfolios

	All Portfolios	Hard Copy Portfolio	Electronic Digital Portfolio
STRUCTURE	• Standards. • Chronological/ Developmental. • Thematic	• Usually three ring binder. • Organized with Table of Contents Dividers and Tabs.	• Can be high tech or low tech. • Web-Pages, PowerPoint, text, sound and video.
CONTENT	• Diverse artifacts showing knowledge, skills and dispositions as a teacher. • Can show best work, developmental process.	• Narratives. • Personal/professional stories. • Photographs. • Paper artifacts such as lesson plans, sample of student work, etc.	• Hyperlinks and PDF Files. • Multimedia. • Can contain many things that do not easily fir into traditional "notebook". • Holistic view of creator.
PROCESS	• A recursive process of creating, collecting, selecting, rejecting, reflecting, projecting.	• Author sifts through files and folders of paperwork, compiles artifacts, may use creative skills similar to scrap booking.	• Author learns technological skill: web-building, multi-media software adaptations.
BENEFITS TO AUTHOR	Teachers: • Select artifacts. • Become learners. • Chart growth. • Gain sense of accomplishment. • Have an edge in job interviews.	• Easy to hand to others for one-on-one feedback.	• Easy to burn a CD or DVD to leave with audience. • Portability. • Accessibility to anyone with internet capabilities. • Easily stored. • Teachers implement more technology in classes.
BENEFITS FOR AUDIENCE	• Show evidence of competence and unique qualities of teacher/learner.	• Interactive in interview. • Multi-sensory experience. • Artistic, human quality. • Use of creative formats.	• Far-reaching audience including students, parents, colleagues, administrators, community members.