

# Teacher Electronic Portfolios

**Susan Slick**

*University of Wisconsin - Stevens Point, USA*

**Patricia A. Shaw**

*University of Wisconsin - Stevens Point, USA*

## OVERVIEW

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.

In the last five years, teacher education programs across America 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.

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” ([http://ali.apple.com/ali\\_sites/ali/exhibits/1000156/](http://ali.apple.com/ali_sites/ali/exhibits/1000156/)). 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, and promoting self-reflection and authentic assessment. Portfolios have created opportunities for meaning-making and ownership of learning, and provided a venue for self-definition. This chapter 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 five 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 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.

Table 1. Comparison of hard copy and electronic portfolios

	All Portfolios	Hard Copy Portfolio	Electronic Digital Portfolio
<b>STRUCTURE</b>	<ul style="list-style-type: none"> <li>Standards</li> <li>Chronological/Developmental</li> <li>Thematic</li> </ul>	<ul style="list-style-type: none"> <li>Usually three ring binder</li> <li>Organized with Table of Contents dividers and tabs</li> </ul>	<ul style="list-style-type: none"> <li>Can be high tech or low tech</li> <li>Web pages, PowerPoint, text, sound and video</li> </ul>
<b>CONTENT</b>	<ul style="list-style-type: none"> <li>Diverse artifacts showing knowledge, skills and dispositions as a teacher</li> <li>Can show best work, developmental process</li> </ul>	<ul style="list-style-type: none"> <li>Narratives</li> <li>Personal/professional stories</li> <li>Photographs</li> <li>Paper artifacts, such as lesson plans, sample of student work, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Hyperlinks and PDF files</li> <li>Multimedia</li> <li>Can contain many things that do not easily fit into traditional "notebook"</li> <li>Holistic view of creator</li> </ul>
<b>PROCESS</b>	<ul style="list-style-type: none"> <li>A recursive process of creating, collecting, selecting, rejecting, reflecting, projecting</li> </ul>	<ul style="list-style-type: none"> <li>Author sifts through files and folders of paperwork, compiles artifacts, may use creative skills similar to scrap booking</li> </ul>	<ul style="list-style-type: none"> <li>Author learns technological skill: Web-building, multi-media software adaptations</li> </ul>
<b>BENEFITS TO AUTHOR</b>	Teachers: <ul style="list-style-type: none"> <li>Select artifacts.</li> <li>Become learners</li> <li>Chart growth</li> <li>Gain sense of accomplishment</li> <li>Have an edge in job interviews</li> </ul>	<ul style="list-style-type: none"> <li>Easy to hand to others for one-on-one feedback</li> </ul>	<ul style="list-style-type: none"> <li>Easy to burn a CD or DVD to leave with audience</li> <li>Portability</li> <li>Accessibility to anyone with Internet capabilities</li> <li>Easily stored</li> <li>Teachers implement more technology in classes</li> </ul>
<b>BENEFITS FOR AUDIENCE</b>	<ul style="list-style-type: none"> <li>Show evidence of competence and unique qualities of teacher/learner</li> </ul>	<ul style="list-style-type: none"> <li>Interactive in interview</li> <li>Multi-sensory experience</li> <li>Artistic, human quality</li> <li>Use of creative formats</li> </ul>	<ul style="list-style-type: none"> <li>Far-reaching audience, including students, parents, colleagues, administrators, community members</li> </ul>

## DEVELOPMENT OF AN ELECTRONIC PORTFOLIO

### Process

The process of developing an electronic student teacher portfolio is evolutionary, ongoing and recursive. Several models (Burke, Fogarty & Belgrad, 1994; Campbell, Cignetti, Melenzyer, Nettles & Wyman, 2004; Danielson & Abrutyn, 1997; Slick, 1997) exist that 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 10 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, Melenzyer, Nettles and Wyman (2004, pp. 22-26) describe the portfolio development process in four stages briefly described below:

1. DECIDE: Determine the purpose of the portfolio, the needs of the potential audience, the availability of essential resources and one's own knowledge and skills related to technology.
2. DESIGN: Select the most appropriate software, storage and presentation medium; create a system which connects artifacts to teacher standards or other required elements of the portfolio.
3. DEVELOP: Incorporate all artifacts, reflections, graphics and so forth into a creative portfolio that is unique to the owner.
4. EVALUATE: Assess both the portfolio content and the design of the multi-media format.

Slick (1997) has integrated several models in her description of the portfolio development process which includes the following sequence:

6 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/teacher-electronic-portfolios/12342](http://www.igi-global.com/chapter/teacher-electronic-portfolios/12342)

## Related Content

---

**Materials-to-Standards Alignment: How to “Chunk” a Whole Cake and Even Use the “Crumbs”: State Standards Alignment Models, Learning Objects, and Formative Assessment—Methodologies and Metadata for Education**

Tom Adamich (2010). *International Journal of Information and Communication Technology Education* (pp. 62-75). [www.irma-international.org/article/materials-standards-alignment/42142](http://www.irma-international.org/article/materials-standards-alignment/42142)

**An XML-Based Approach to Multimedia Engineering for Distance Learning**

T. Arndt, S. K. Chang, A. Guericoand P. Maresca (2007). *Future Directions in Distance Learning and Communication Technologies* (pp. 108-137). [www.irma-international.org/chapter/xml-based-approach-multimedia-engineering/18748](http://www.irma-international.org/chapter/xml-based-approach-multimedia-engineering/18748)

**Development of Adaptive Kanji Learning System for Mobile Phone**

Mengmeng Li, Hiroaki Ogata, Bin Hou, Satoshi Hashimoto, Yuqin Liu, Noriko Uosakiand Yoneo Yano (2010). *International Journal of Distance Education Technologies* (pp. 29-41). [www.irma-international.org/article/development-adaptive-kanji-learning-system/47009](http://www.irma-international.org/article/development-adaptive-kanji-learning-system/47009)

**Mobile Educational Technology**

Chris Houserand Patricia Thornton (2008). *Online and Distance Learning: Concepts, Methodologies, Tools, and Applications* (pp. 127-135). [www.irma-international.org/chapter/mobile-educational-technology/27377](http://www.irma-international.org/chapter/mobile-educational-technology/27377)

**Computer Technology: An Essential Component for Teaching a Fashion Production Management Course**

Shu-Hwa Lin (2011). *International Journal of Information and Communication Technology Education* (pp. 80-88). [www.irma-international.org/article/computer-technology-essential-component-teaching/49712](http://www.irma-international.org/article/computer-technology-essential-component-teaching/49712)