Introduction

Portfolios have been used for a variety of purposes and are continuously changing in content, definition, audience, and format. Since the mid-90s, the term "ePortfolio" or "electronic portfolio" has been used to describe student work collected digitally on a CD or at a Web site. Batson (2002) describes ePortfolios as the intersection of three trends:

- Just about every kind of student work is already in digital format or can easily be converted electronically
- The Web is becoming increasingly accessible to all
- Databases on Web sites, allow students to manage large volumes of work.

With the advance of online management systems, many colleges are utilizing contemporary tools to collect, manage, and present student work verifying their successful progress towards completion in their educational program. This short paper will examine two scenarios in which the process of portfolio sequels the product.

For the purpose of this paper a list of common definitions are provided.

Electronic portfolios

A definition provided by the National Learning Infrastructure Initiative (NLII, 2003) suggests an electronic portfolio is
- a collection of authentic and diverse evidence
- drawn from a larger archive representing what a person or organization has learned over time
  on which the person or organization has reflected, and
- designed for presentation to one or more audiences for a particular rhetorical purpose.

Artifact:
- A product or a result of work.

Evidence:
- A purposeful selection of a piece of work with an explanatory narrative that demonstrates a specific competence, standard or requirement.

Scenario One

This section is written for general college programs planning to initiate an online portfolio program for learning assessment. A system for determining the required components in a third party portfolio system will be provided as well as a link to the University of Wisconsin-Stout's Title III site. This section addresses a possible approach to selecting a portfolio application based on general assessment needs, and provides a view of our process for choosing a portfolio package, and initial implementation.

Background

In 2004 the University of Wisconsin-Stout was awarded a Federal Title III grant to improve student services and to aid student retention and assessment. Subsequently, I was hired to create a Web presence for the project and research the development of a campus-wide portfolio to be implemented over the course of five years. Though the School of Education already had a program in place, which specifically addressed Wisconsin Department of Education (DOE) Standards, it was determined that a portfolio less specific to teacher education and more generally suited to an assortment of programs was needed. Information on our Title III project can be found at: http://www.uwstout.edu/mba/t3project/

Process

We first determined a list of specific needs. UW-Stout offers a wide array of majors and thus we needed a portfolio that could be tailored to a variety of programs and allow incorporation of multiple file formats to accommodate diverse areas such as, Studio Art, Interior Design, as well as Science, Math, Dietetics, and etc. We needed a portfolio that would allow faculty to review student progress and provide feedback to the student. In addition, we

needed an application that allowed a reporting structure in the form of data collection. A variety of portfolio systems were reviewed based on these and other specific requirements listed in spreadsheet form for evaluation. By process of elimination (and based on budget) we settled on a product that we believed would meet our needs. We began creating training materials specific to our needs as they related to the portfolio we had chosen, and then designed a Website that would provide online support. We then solicited faculty who would be interested in having their students create portfolios to demonstrate accomplishments specific to their class. Next we hired student hourly workers and trained them in how to create the portfolio. The student trainers would then provide training and support to fellow students as they were setting up their portfolios, with the faculty providing input as to what artifacts and evidence they required to show their progress in the class. Lastly, we introduced the portfolio to the faculty and invited them to create a portfolio to better understand the process before introducing it to their class.

Implementation

We rolled out the portfolio in the fall of 2006. Early on there was considerable discussion about the user interface and look and feel of the portfolio system rather than on determining how to show student progress. We realized that there was a need to realign the focus of discussion to student-centered learning (Huba & Freed, 2000). and developed Summer Institutes for faculty designed to provide information on the process of assessment and alignment with the goals and outcomes of their particular programs (Walvoord, 2004). Utilizing an individualized approach to implementation, we provided student trainers to assist the faculty with the introduction of the portfolio to their class or classes. The student trainers were majors in their respective program and therefore had knowledge of the specific course needs related to the course outcomes.

Prologue

After negotiating a contract with a specific vender, we later learned the product was still in development and less functional than first reported. We are now in the process of determining another possible vender, and in the meantime, I am developing a portfolio template with UW-Stout's specific needs in mind.

Scenario Two: Teacher Preparation

This section is written for educators in teacher preparation programs who are considering or planning the development, implementation and assessment of electronic portfolios for their teacher candidates. While examples, templates and information specific to teacher education are provided, the process and materials support replication in alternative educational environments. This topic addresses the need for authentic assessment within the field of distance learning and provides practical suggestions and strategies for establishing a climate of reflection and demonstrated professional growth.

Background

Our college began piloting and implementing the use of an electronic portfolio as a way to demonstrate meeting the Teaching Performance Expectations (TPEs), which are expected of every teacher candidate seeking a California teaching credential. The TPEs are linked to the California Standards for the Teaching Profession (CSTPs), the teaching standards for all teachers in the profession. To obtain a credential, teacher credential candidates must demonstrate meeting all TPEs. The electronic portfolio has become a major source for examining student progress in meeting the TPEs. However, the main focus of the electronic portfolio as agreed upon in our teacher preparation program provides us with a model that favors supporting the learning process over a focus on accountability. Portfolios remain one of many ways and levels in which learning is identified and demonstrated.

We want our learners to become reflective practitioners who are accountable for their learning. The portfolios make visible what students do and what they think about what they are doing. During our prerequisite classes, we require teacher candidates to obtain a subscription to Task Stream and set up a Direct Response Folio (www.taskstream.com). This provides us with the application framework and dynamic online environment to actively support and engage ongoing reflective practice. We encourage teacher candidates to reflect on their educational experiences, select artifacts that best represent their progress towards goals, and to support their choices by providing descriptive narrative that documents what they chose and why they chose it. This narrative reflective element is critical to students' self-assessment and to the successful development of effective patterns for life-long

learning. Guidance is offered as teacher candidates construct their narratives.
(http://lynx.csusm.edu/coe/eportfolio/Narrative.Directions.htm)

Artifacts

Artifacts are items uploaded as attachments in much the same way students would add an attachment to an email. Artifacts often consist of teacher candidate work completed during class. These might include a writing sample, an auditory file of the student reading aloud, a scanned document, samples of original artwork, examples of problem-solving, journals, photographs and perhaps student examples taken from the K-12 classrooms with whom teacher candidates worked during their fieldwork. Work completed from online courses are easily included as they tend to consist of digitally formatted files such as videos, web pages, structured archived discussions, and digital files such as PowerPoint. Students ground their portfolio in a carefully articulated philosophy statement that is initiated in one of their prerequisite classes. This statement, along with the TPE's, plays a critical role in helping to inform the process of sorting and selecting items to serve as artifacts.

Tracking Sheet

In determining an organizational structure, which also may serve as a table of contents, faculty provided a form created in Excel that helps students align their selected artifacts with California TPEs. This tracking sheet includes buttons linking viewers to details of the TPE represented in each column. This has proven an effective strategy and tool for storing, retrieving, and maintaining records. Artifacts are hyperlinked to this form as they are added. One of the first items to be scanned and uploaded is a students' statement of own work indicating that the work included in the portfolio is their own. This is located online at http://lynx.csusm.edu/coe/eportfolio/index.asp

Assessment

As suggested previously, the portfolio serves as one of many levels for identifying desired learning. The assessment and evaluation of the electronic portfolio is multi-faceted and includes both formative and summative assessment. Teacher candidates receive ongoing constructive feedback from faculty throughout the process simply by selecting the process called Publish/Share and sending a request to the appropriate faculty member(s). In the completion stages there is a choice for participants to request final evaluation. However, in most cases, the individual artifacts completed during previous classes have already been assessed according to rubrics that were provided at the time of the assignment. Participants are able to retain all previous comments for future use. All reviewers' comments and student responses are viewable during the evaluation process. There is also the potential for external evaluators to contribute to the process. There is inherent value in the ability to see drafts followed by edited versions and to be able to track the increased sophistication in thinking and self-reflection as evidenced in increasingly comprehensive written narratives.

Our COE is currently grappling with the complexity of the final summative evaluative process and are seeking and promoting effective formative measures to contribute to the professional development of the teacher candidate during the process. Through processes of writing, reflecting and interpreting the importance or relevance of the contents, students are developing strategies for reflective practice. Dewey defined reflective thought as 'active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends' (Dewey 1933: 118). The inclusion of their ongoing reflections for the duration of the teacher preparation program has contributed to the building of new understandings and relationships of ideas.

Discussion

In the development of electronic portfolios, the College of Education provides our teacher candidates with the necessary help, direction, templates, online resources and scaffolding to get started. The College of Education has determined the purpose, organization, process, and audience. This external locus of control does not yet encourage teacher candidates to identify further purposes to advance the portfolio process for themselves or their future students. Teacher education programs benefit from a more "bottom-up" voluntary process that is owned and inspired by teachers (Teitel, Ricci & Coogan, 1998). As we expand our goals and seek ways to foster learner's intrinsic motivation to design, develop, and present their portfolios, we will become more successful acquiring participant

ownership. I agree with those who have made the assumption that the greater control learners have over each of the portfolio components of content, purpose and process the greater will be their intrinsic motivation. But as portfolio experts suggest, this hypothesis needs to be supported by empirical research (Barrett, 2004).

References

Barrett, H. (2003) Presentation at First International Conference on the e-Portfolio, Poiters, France, October 9, 2003. http://electronicportfolios.org/portfolios/eifel.pdf

Barrett, H. (2006) *Electronic portfolios*. Retrieved May 29, 2006 from http://www.electronicportfolios.com/

Barrett, H. (2006) *Dr. Helen Barrett's favorite links on Alternative Assessment & Electronic portfolios*. Retrieved May 29, 2006 from http://www.electronicportfolios.com/portfolios/bookmarks.html

Barrett, H. & Wilkerson, J. (2004). Conflicting Paradigms in Electronic portfolio Approaches. *Choosing an Electronic portfolio Strategy that Matches your Conceptual Framework*. Retrieved May 30, 2006 at http://helenbarrett.com/systems/paradigms.html#motivation

Batson, T. (2002) "The Electronic Portfolio Boom: What's it All About?" Syllabus. Available online: http://www.syllabus.com/article.asp?id=6984

Dewey, J. (1933) *How We Think*. New York: D. C. Heath.

Diaz, M. (1994) The Portfolio: Sonnet, Mirror and Map in Burke, K. Ed (1996) *Professional Portfolios*. Skylight Training & Publishing.

Electronic portfolio. Retrieved May 29, 2006 from http://lynx.csusm.edu/coe/eportfolio/index.asp

Huba, M., Freed, J. (2000) *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*. Boston: Allyn and Bacon.

Lamb, A. (2002). *Electronic Portfolios: Students, Teachers, and Life-long Learners*. Retrieved online May 31, 2006 at http://eduscapes.com/tap/topic82.htm.

Teitel, L., Ricci, M. & Coogan, J. (1998) "Experienced Teachers Construct Teaching Portfolios: Culture of Compliance vs. a Culture of Professional Development" in N. Lyons (ed.) With Portfolios in Hand. (pp.143-155) New York: Teachers College Press.

Walvoord, B. (2004) *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*. San Francisco: Jossey-Bass.

Zubizarretta, J. (2004) *The Learning Portfolio: Reflective Practice for Improving Student Learning*. Boston: Anker Publishing Company.

Biographical Sketch of the Authors

Jean Haefner

Jean has been enamored with multimedia for over 20 years and with degrees in Advertising Design and Photography and a MFA in Interactive Forms, MS Haefner has taught in these areas, and worked professionally as a Web Designer and Online Course Developer for over 10 years. She recently took a job under a Title III grant as Technology-Based Curriculum and Web Designer at the University of Wisconsin-Stout where she is helping to spearhead a campus-wide e-portfolio initiative. She has prototyped and/or developed a number of Web presences there; including the Advisement Center and Transfer Student sites, the Title III main site, and various help sites. A favorite is the information oriented site developed with Flash templates called e-Links! In addition, she currently teaches various multimedia courses in the Art and Design Department at UW-Stout.

Her research areas of interest include: interactive art and digital narrative, Web 2 interaction and emerging design principles, video conferencing, learning portfolios, student-centered teaching, and interfacing with the metaverse in Second Life.

Contact Info:
University of Wisconsin-Stout
Menomonie, WI 54751
E-mail: haefnerje@uwstout.edu
Title III Office: 301 Millennium Hall
Phone: 715.323.5197
Art and Design Dept. Office: 190 Micheels
Phone: 715.232.1500

Joan Hanor

As professor in the College of Education at California State University San Marcos, **Dr. Joan Hanor** has been developing and teaching distance and educational technology courses for over twelve years. She actively partners with county offices of education, institutes of higher education and K-12 school districts to promote increased and effective uses of videoconferencing.

Contact Info:
California State University San Marcos
College of Education: University Hall 220
333 S. Twin Oaks Valley Drive
San Marcos, CA 92096
E-mail: jhanor@csusm.edu
URL: http://www.ilast.org
Phone: 760.750.4305
FAX: 760.750.3160