VSTE EDGE
A Publication of the Virginia Society for Technology in Education

Featured Link

Educational Technology Action Network

Contact Us

April 2005 **Vol. 2 No. 4**

The VSTE Edge is in need of
editors and contributors for 2005-06.
To learn more, see "Help Wanted"

Articles appearing in the latest *VSTE Journal*

Electronic Portfolios in the K-12 Classroom

Greg Sherman, Ph.D.
Managing Editor, VSTE Edge

Like most professional conferences devoted to technology in education, this year's VSTE conference included presentations addressing the topic of electronic (or digital) portfolios. Historically, portfolios have been used by teachers in many different ways. But with the pervasiveness of computer-based technologies in the home and classroom, electronic portfolios have emerged as a viable option for many educators wishing to incorporate technology more effectively into their practice. And discussions about the value of computer-based portfolios in the teaching and learning experience often begin with a need to clarify which of two

VSTE World Headquarters:
vste@vste.org

VSTE Edge Editor:
edge@vste.org

VSTE Edge Submissions:
edge_submissions
@vste.org

roles portfolios might best play in the classroom: 1) portfolios as a means of assessing specific learning outcomes, or 2) portfolios as a showcase for outstanding student accomplishments.

These two different roles certainly reflect *some* of the possible ways in which a teacher or student might use a portfolio, but there are many more reasons to implement an electronic portfolio experience in the classroom based on the multiple roles that a portfolio *could* play. For example, imagine a teacher wanted her students to include an original short story within a web-based portfolio. This "artifact" in the portfolio (the finished story) would most likely consist of the final product of a writing experience that involved editing, revisions, and reflections on how well the story met the minimum requirements articulated within some type of evaluation checklist or rubric. Such a checklist might include basic criteria including story structure requirements, spelling and grammar guidelines, etc. But the requirements might also include such elements as the inclusion of earlier drafts, reflections upon how suggested edits were accomplished, and reactions about the story from parents, friends, or even editors. Tracking revisions, posting reflections on the writing process, and making the story accessible for public viewing could change the nature, and ultimately the effectiveness, of the overall writing experience. This change might occur because the roles the portfolio played within the overall writing experience were beyond simply using the portfolio as a container for completed work.

The chart below summarizes a number of these different roles that portfolios could play within the teaching and learning experience. Following the chart are some links to web-based resources associated with electronic portfolios. These resources constitute examples of electronic portfolios in action, as well as support mechanisms for educators wanting to design and implement electronic portfolios within their teaching.

Role	Description
Artifact Creation as Instructional Context	An electronic portfolio is defined by the digital artifacts it presents. The content of such artifacts does not often relate directly to the use of technology, but successfully using technology to create artifacts often necessitates the learning and/or application of a variety of worthwhile skills. This represents a very concrete learning context. In addition to defining concrete creation-oriented learning contexts, the actions surrounding the development of

	digital material often defines experiences that involve learning and/or applying problem solving as well as collaboration skills.
Goal-Setting	Portfolios can help define both large "meta" education goals as well as smaller instructional goals. Planning the creation of portfolio artifacts involves teacher-learner communication and clear goal-setting. If analytic rubrics will be used to evaluate the artifacts, specific categories and items within the rubric constitute clear goals available for review at any time throughout the learning process.
Instructional STrategies	Accessible portfolio artifacts can provide a variety of examples and nonexamples useful in the instructional process. Additionally, the creation of electronic portfolio artifacts in an environment rich with communication options provides many opportunities to receive detailed feedback over the performances being learned and applied throughout the portfolio artifact development process.
Assessment	Successfully developing artifacts for an electronic portfolio can constitute evidence of learning. The learning of content-related as well as technology and collaboration skills can often be clearly identified by within a successfully-completed portfolio artifact. Designing and developing electronic portfolio artifacts generally constitutes a complex set of tasks, so detailed assessment instruments (including analytical rubrics) are often used. This type of assessment can encourage the learning and assessment of higher-order, critical-thinking intellectual skills. In addition, learners can use detailed assessment rubrics as guides to help them navigate the experience and acquire the intended skills.
	The experience of designing, developing, and presenting

Reflection	electronic artifacts provides numerous opportunities to reflect on the learning experience. It is very easy to include reflection requirements within the portfolio. Directing reflective activities and experiences is a very effective instructional strategy, particularly for adult learners.
Communication	Electronic portfolios make it easy to distribute artifacts to others (family, friends, colleagues, and potential employers), especially if the digital portfolio is Web-based. Electronic portfolios can also provide the mechanisms for helping group members living in different geographic locations work collaboratively on projects.
Instructor Planning and Management Tool	Creating a learning environment in which learners must develop electronic portfolio artifacts can help teachers manage the instructional process by enabling them to view, track, and evaluate progress. Also, determining the types of artifacts to be included within student portfolios and creating the analytic rubrics to help guide student portfolio development constitute effective planning practice.
Learner Organization Tool	Portfolio development can help learners organize their time and resources throughout a learning experience. "In Progress" and "Completed" folders, as well as calendars, timelines and progress checklists can help to organize resources and monitor progress. In addition, analytic assessment rubrics can be used as instructional scaffolds (support mechanisms), and existing artifacts can be used as instructional examples.
Interdisciplinary Teaching and Learning	Most portfolio artifacts reflect the application of skills learned within a number of different content areas. Additionally, the application of general technology-related skills is clearly evident within each artifact. The skills represented by each artifact can most likely be easily aligned with a variety of academic standards. Professional educators should communicate with each other about the standards facilitated within their courses versus those addressed in other courses. This type of dialogue can contribute to sustaining comprehensive, cohesive, and *quality* educational environment.

Resume	A digital portfolio can be used as a means of communicating an impressive resume, complete with the obvious representation of advanced computer-use skills .
Historical Arifacts & Stories	Artifacts included within portfolios can become permanent and accessible records detailing specific events or chapters in the portfolio developer's history. These artifacts tell a unique story.

Most resources on the web related to electronic portfolios address their use within teacher education programs at colleges and universities. However, there are some sites that present useful information and examples related to the use of electronic portfolios in the K-12 environment. The following sites provide access to a variety of information sources and examples associated with the use of electronic or digital portfolios in the elementary and high school classroom:

Society for Information Technology and Teacher Education (SITE) Portfolio Page

This is a small collection of articles about electronic portfolios.

Helen Barrett's Electronic Portfolio Site

Helen is one of the foremost experts in the application of electronic portfolios within the teaching and learning experience.

Annette Lamb's Electronic Portfolio Page

Annette is another expert in the area of technology integration in the classroom.

Kathy Schrock's Guide for Educators: Portfolios

Another resource from Kathy Schrock's excellent teacher helper site at Discovery School.

Education World's Electronic Portfolio Site

This is a collection of articles and resources dedicated to electronic portfolios in the K-12 classroom.

Alice Christie's Electronic Portfolio Website

This website presents numerous examples of electronic portfolios used in the K-12 environment.

If you would like to share additional resources related to electronic portfolios, please e-mail us at edge@vste.org.

-GS-

Fall/Winter 2004-05 *VSTE Journal* articles

Download entire issue (200 kb)

Desperately Seeking Scaffolds by Greg Sherman

Do We Need to Change How We Assess Learning? by Gary Whitt

Adopting & Implementing Blackboard at a Virginia Middle School by Nancy Hoskins

Infusing Technology Into Any Technology Program by Wanda Walters

Universal Design for Learning: Assuring Access & Success for All byFran Smith and Pamela Leconte

For more information about submitting an article to the VSTE Journal, contact journal@vste.org

---

Help Wanted

Do you enjoy helping colleagues find resources for technology integration? Do

you have great ideas for classroom or administrative uses of technology at any level (K-college)? Are you concerned about best-practices related to use of educational computing and communication tools?

If you are interested in becoming an editor or contributor for the *VSTE Edge*, we have a job for you! You need not be a technology guru or a best-selling writer to apply! We are looking for enthusiastic people who can find ideas and are willing to share them.

So that we can learn more about you, please follow the short, two-step process:

1) Download and fill out the VSTE "Get Involved!" form.

2) Send the form as an attachment to the e-mail address listed on the form, or fax it to the number provided.

After we receive your application of interest, we will be in contact with you! Those appointed to positions will start by late June 2005.

Virginia Society for Technology in Education
PMB-149 9702 Gayton Road Richmond, Virginia 23233
804.320.3424 vste@vste.org