

Digital Portfolios

Documenting
student
performance

by Melinda Kolk

Your students are creating fantastic projects to show what they know. You can take their learning, and your ability to assess their achievement, to an even higher level using digital portfolios. Portfolios have long been a mainstay in the visual arts, where skill and expertise cannot be accurately represented by percentage points and letter grades. Electronic portfolios have been around for years, but the advent of powerful new technologies makes building, maintaining, sharing, and archiving student learning in digital form easier than ever before.

A digital portfolio is a computer-based collection of student performance over time. Portfolios make classroom learning more accessible to parents, administrators, and other district support staff because they provide a window into student learning. A portfolio showcases both student achievement and student learning over time. To demonstrate growth, a portfolio will often include similar work done over the course of several years.

What Should a Digital Portfolio Include?

When used as a student assessment tool, digital portfolios should demonstrate that “the student is involved in meaningful performance tasks; there are clear standards and criteria for excellence; there is an emphasis on metacognition and self-evaluation; the student produces quality products and performances; there is a positive interaction between assessor and assessee.” (Burke, 1999) The performances students include in their portfolios should be related to the curriculum and engage students in meaningful learning.

Students should choose the content of their portfolios with the clear understanding that the items should include examples of their best performances, demonstrations of achieving a particular objective, and examples showing personal and academic growth. The content should be indicative of a wide range of skills and abilities and provide clear demonstration of student ability.

One of the most important ingredients in a portfolio is the student’s reflection on their work. Students should include reflections on each performance to clarify why pieces are included in a portfolio. This is perhaps the most valuable part of

the portfolio, since it provides a much clearer window into the learning of each student. Student reflections help us “discover and observe what our children are really experiencing, thinking about, questioning, wondering about, trying, and attaining.” (Niguidula, 2002) In the words of John Dewey, “We don’t learn from experience; we learn from reflecting on experience.” The tools used for creating digital portfolios make it easy to type or record a voice reflection.

A portfolio should also include clear criteria for judging the merit of each performance contained in it. Portfolios should include a detailed rubric explaining the effectiveness and overall value of each performance. The rubric helps students understand expectations and provides a guide as they reflect on the different aspects of their performance.

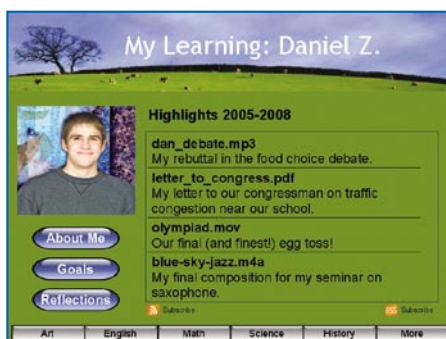
What Is the Teacher’s Role?

Because portfolios include a collection of performances that demonstrate growth and include student reflections, they provide additional assessment information beyond what can be gleaned from a traditional letter grade. In the same way that a simple letter grade may not capture learning that has happened throughout the process of a technology project, a portfolio provides a more comprehensive view of each student’s learning.

A student’s digital portfolio also provides a vehicle for regular feedback and dialogue with their teacher(s). As students consistently gather and reflect on their work, instructors develop a clear picture of the learning that is taking place and are better able to identify areas that need attention.

Why Go Digital?

Computers and authoring programs provide students with tools to compile a digital portfolio. Using multimedia tools, students can create portfolios that demonstrate performances using text, sound, graphics, and video, making them highly representative of a varied body of work. Self-reflections can be recorded, as can oral presentations, dramatic performances, musical compositions, and more. In today’s connected world, a digital portfolio is easy to retrieve, to store, and to share.



How Do You Begin?

Before students begin working on portfolios, be sure to determine your assessment goals, priorities, and outcomes. You need to develop clear definitions for the selection of content. You will want to start by creating a shell, or template, for the portfolio. This will help ensure that students effectively organize the information in their portfolios and will guarantee that reflection and assessment criteria are properly represented. You can organize a successful portfolio around your state's proficiency goals, or by your district's curriculum content.

Just because students start with a template does not mean their portfolios should be formulaic and dull! Be sure to leave room for students to showcase creativity and personality. They can do this when they create the self-reflection and by their choices for portfolio content. You may also want to leave room for them to decorate or personalize their portfolios with photographs, illustrations, music, and original artwork.

In Summary

Electronic portfolios require a large investment of time and effort, but the dividends for improved assessment are worth it. As you incorporate electronic portfolios into your classroom or school, remember that you will want to revise the format and content as you become more practiced at assessing performance and students become more proficient at metacognition and portfolio management.

Bibliography

Barrett, Helen C., Ph.D. (2001) *“Electronic Portfolios = Multimedia Development + Portfolio Development: The Electronic Portfolio Development Process.”* Electronic Portfolios. Washington, DC: American Association for Higher Education.

Burke, K. (1999). *How to Assess Authentic Learning*. Arlington Heights, IL: Skylight Professional Development.

Niguidula, David. (2002). *The Digital Portfolio: A Richer Picture of Student Performance*. Oakland, CA: Coalition for Essential Schools.

Resources for Using Portfolios

David Niguidula. Digital Portfolio: *A Richer Picture of Student Performance*:

http://www.essentialschools.org/cs/resources/view/ces_res/225

Biography



Melinda Kolk

Melinda Kolk is the author of *Teaching with Clay Animation* and has published articles on creativity and project-based learning in education technology journals around the world.

Creativity Connection

Involving students in assessment



Katy Hammack

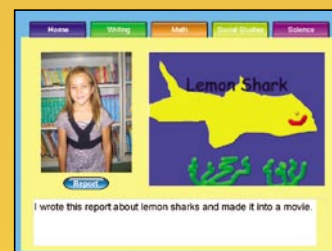
“When I was a classroom teacher, I would send my children home at the end of each year with a huge folder full of their best work. I first became interested in electronic portfolios at the NECC 2007 Conference in Atlanta, when I watched a presentation on e-portfolios using WebBlender. What a wonderful way to showcase student work! I realized that electronic portfolios are a convenient, portable way to show off student work and create lasting memories that students and parents will treasure.

I went home and worked with a student to create a sample portfolio. Dana brought artifacts from her work in third grade: art projects, stories, math papers, some short videos, and a science project, and we got right to work. I loved how easy it was for her to drag digital stories, pictures, artwork, and her science project right into her portfolio. We also included a video of Dana receiving an award for winning the spelling bee and another of her playing the piano in a talent show. She spent additional time writing and recording explanations for each item and adding clip art and animations to personalize her portfolio. We ended by publishing a CD she could take home.

After sharing this sample at my school, one courageous teacher, Kathy Lauderbach, asked for help implementing portfolios in her third-grade classroom. We started the first month of school with students personalizing the home page of their portfolios with identifying text, personal photos, and decorations. When students completed their next project, a digital storytelling project, we had our first items for the students' portfolios. Over the course of the year, we added other student work to the portfolios, including graphs made in Excel, arrays showing multiplication fact families, photos, and descriptions of a relief map of California, poems, reviews of the play *How the Grinch Stole Christmas*, and digital science reports on shark species.

At the end of the year, students worked with fifth-grade buddies to finish the portfolios and burn them to CD to take home. Kathy was so delighted with the quality of the student portfolios that she learned to use a labeling program to make custom labels for the CDs.

Since students knew their work would be published digitally, they were more careful and conscientious with the quality of their work. The students took great pride in the finished portfolios, and parents were delighted as well.”



INTERVIEW

Helen Barrett: Digital Portfolio Pioneer

Recently, I had the good fortune to talk with Helen Barrett. Those of you who already utilize digital portfolios may know of her extensive work in this field and may have even been influenced by many of her ideas. Here are a just a few of the thought-provoking ideas Helen shared during our fantastic conversation!

When did you first become interested in digital portfolios?

In 1991, I completed a study for the Alaska Department of Education on the potential of using technology to collect and support portfolios. In 1999, I wrote and received a PT3 grant for the University of Alaska Teacher Education Program and began exploring portfolios as tools to document student learning.

What is the benefit of creating digital portfolios?

As Paulson and Paulson so eloquently put it, “The portfolio is a laboratory where students construct meaning from their accumulated experience.”

How has the advent of Web 2.0 tools changed your perspective about digital portfolios?

ePortfolio 1.0 is either a set of static Web sites or documents that can be both learner- and institution-centered. ePortfolio 2.0 uses Web 2.0 tools that include opportunity for change, control, customized look and feel, collaboration, and feedback, making them much more learner-centered.

I am a big fan of learner-owned lifetime personal Web space. At school, students have a place to store their work, but often it isn't digital or available after they leave the grade or school. Lifetime personal Web space makes learning visible. It also enables students to keep a working portfolio—a digital archive that is both a collection and reflection on their lifetime learning.

Why should I start using digital portfolios with my students?

If you are currently doing paper portfolios, moving into the digital realm is a natural progression. Technology makes the maintenance of portfolios easier. If you are not doing paper portfolios, your focus should be less about digital portfolios and more about adopting a revised view of documenting learning. The very best way to boost student achievement is to improve formative assessment, according to the Assessment Reform Group in the U.K.

How do I introduce digital portfolios to my students/teachers/school/district?

Teachers who try to do this alone may have a hard time. Find a partner in your school who can help you maintain enthusiasm. It is hard for both students and teachers to see the benefits of digital portfolios if implementation is not sustained. If this is a school-wide or system-wide objective, it is much easier to both implement and sustain.

Digital portfolios seem like such a fantastic way to involve students in the assessment process. Shouldn't everyone be creating them?

In my blog, I recently responded to a question posed by ISTE about whether ePortfolios could replace standardized tests. My opinion is that they shouldn't. The power of digital portfolios comes from their student-centered nature. Self assessment, when students critique their own work and reflect on the learning process, is the most powerful and long-lasting form of assessment.

If portfolios are required, their nature changes to one of an assessment management system, which is institution-centered.

Lee Shulman states that in order to use portfolios as a form of high-stakes assessment, you need to create an objective scoring system and in doing so you “end up objectifying what's in the portfolio to the point where the portfolio will be nothing but a very, very cumbersome multiple choice test.” If we use portfolios solely for accountability, we deny them their full potential as a learning tool.

Keep portfolios as student-owned, student-centered tools for learning. By giving students ownership, we help them build a lifelong practice of reflection and the ability to tell their own stories of their learning and growth over time.

Resources

Dr. Helen Barrett. Electronic Portfolio Development: <http://electronicportfolios.com>

Batson, Trent. The ePortfolio Hijacked. Friday, December 14, 2007. http://www.campustechnology.com/articles/56617_2/

Paulson, P., & Paulson, F. L. (1991). Portfolios: Stories of knowing. In P. H. Dreyer (Ed.), *Claremont Reading Conference 55th Yearbook 1991: Knowing the power of stories. Claremont CA Center for Developmental Studies of the Claremont Graduate School*. ERIC Document Reproduction Service: ED377209.

Biography



Helen Barrett

Helen Barrett is currently designing a book for Boomers and Gen Xer's titled, *Your Digital Self*, an exploration about how we show ourselves to the world using Web 2.0 tools.