

Kathy Schrock's Tech Quest

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What are electronic portfolios and how can I store them?

by Kathy Schrock

As more and more technology appears in the classroom, teachers are finding new and exciting ways to use it to support teaching and learning. Many teachers, for example, are getting students involved in supplementing traditional portfolios (examples of student work from throughout the year) with electronic versions. Electronic portfolios can contain text, digital and scanned images, video clips, sound clips, and more. This data, however, takes up a lot of space on a computer's hard drive. To learn tips for temporarily and, in some cases, permanently saving information in students' electronic portfolios, let's go on a **Tech Quest**.

A Tech Quest is a model of professional development in which each letter in "quest" stands for a step we'll explore. Each quest is aligned with one of the standards from the International Society for Technology in Education's "National Educational Technology Standards for Teachers" (<http://www.iste.org/>).



100 MB Iomega Zip® drive and disks

The Quest: Storing Electronic Portfolios

Q Questioner: Who is going on the quest? It may be a classroom teacher, a computer teacher, or a technology specialist in your school.

U Understanding: What is the purpose of the quest? What is an electronic portfolio? What are some options for storing electronic portfolios?

E Explanation: Exploring options for finding an in-depth answer With the recent addition of computers, digital cameras, and scanners to the classroom, there has been considerable growth in the creation of electronic portfolios. These electronic portfolios usually contain the results of a performance-based assessment, such as a videotaped clip of a presentation or speech, or a multimedia project. They may include pictures, sounds, recorded voices, movie clips, links to the Internet, and scanned artwork and papers. The template many teachers use to create these electronic



Kathy Schrock is a retired technology director and the creator of *Kathy Schrock's Guide for Educators*.

portfolios includes a table of contents, a student-written description of the portfolio-making project, a student-written evaluation of the process and the product, and the showcased product itself.

Storing electronic portfolio data takes up a lot of space on the computer hard drive. One photograph, for example, can take up more than one megabyte of hard-drive space, and one second of digital video takes eight megabytes of hard-drive space. That means that a one-minute video would take up almost 500 megabytes! Few classroom computers are able to provide this type of storage space for individual students. But there are several ways to expand your storage capacity.

Servers

If your school computers are networked, there's probably a file server available for storing information. In order to provide enough hard-drive space for the entire school population, there may be a limit to the amount of storage space available to you and your students. If you are planning to create classroom portfolios, ask your network manager for as large an allocation of space on the server as possible for saving the students' portfolios. It would also be helpful to have your network manager create a classroom server account so students can save data in their own area on the server. If there is not enough room on the server's hard drive, consider writing a grant for an additional hard drive. Be sure to ask your school's technology coordinator about the specifications of the hard drive you will need.

External storage drives

An external storage drive is another suitable option for storing large files. There



Iomega Zip® drive, 250 MB

are a variety of these to choose from for both Macs and PCs. I would suggest the 250 megabyte USB Iomega Zip® drive (www.iomega.com/). With this option, students may have their own Zip® disc to store their work. If you consistently use this USB version,



BUSlink USB external hard drive

you can easily share the device between classrooms and computer

platforms. There are also external, USB hard drives starting at six gigabytes in size. Some companies

Sources: Finding out more information Learn more about electronic portfolios by visiting the following sites.

<http://www.ash.udel.edu/ash/teacher/portfolio.html>

This site features an overview of how to create and use electronic portfolios in the classroom.

<http://www.siue.edu/~jibell/assessment.htm>

This site features a rubric on assessing electronic portfolios based on the ISTE standards.

www.essdack.org/port/

Here's a practical look at the techniques involved in creating electronic portfolios.

http://www.mehs.educ.state.ak.us/portfolios/why_digital_portfolios.html

This essay covers the pedagogical reasons for electronic portfolios.

T Thoughts: Afterward, reflect on your quest Ask yourself, "What are ways I can use electronic portfolio assessment in my classroom to support teaching and learning?"

Why Electronic Portfolios?

Electronic portfolios, in contrast to traditional portfolios, can

- help students learn valuable computer skills.
- take up very little physical space.
- let children take their original writings and projects home to share with parents, while the digital copy stays at school.
- allow students to display their work on the Internet. This motivates them to produce high-quality work and lets them compare their work with that of students from other classes, schools, or years.
- be interactive. Students can add links to cross-reference pieces. For example, if they write about a historic event, they can add a link to a picture of the poster they made about the same event.
- contain things that do not easily fit into traditional portfolios -- audio clips of students reading or playing music, videotaped presentations or performances, animated stories, artwork, and more.

gigabytes in size. Some companies that manufacture these external hard drives are BUSlink (www.buslink.com/) and Simple Technology (www.simpletech.com/).

CDs

One of the most common methods for storing electronic portfolios is using CD-Record/Record-Write (R/R-W) drives and burnable CDs.



These external CD-ROM drives are reasonably priced and the CD-R discs can each hold 600 megabytes of information. And better yet, they are under \$1 apiece! If you leave the recording sessions open on the CD-R media, students can continue to add information to the CD as they finish projects. The CDs can also be carried from class to class and used from year to year to document student progress. (**Note:** CD-RW discs create a few problems since they can only be read in another CD-RW drive, so it is best to use the CD-R media.)

Online

Some of the newest large-file storage solutions are those that are appearing online. Driveway (<http://www.driveway.com/>) and Freedrive (<http://www.freedrive.com/>) are two online storage areas that allocate 30 to 50 megabytes of free storage space

to each user. You may want to create an account for yourself and a separate account for each student in your class. (Due to the Children's Online Protection Privacy Act [COPPA], it is recommended that you have parents sign up each student or obtain parental permission before registering students.) Consider writing a note to the online storage company, explaining that you are a teacher who is in great need of more space for student projects. You may get some unexpected, gratis results!

MEETING THE STANDARDS

This month's TechQuest addresses ISTE standard V.b: Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.