

PUTTING IT ALL TOGETHER: Examples From the Field

As teachers become familiar with the benefits and possibilities of technology for young children, they gain confidence in their own abilities to harness these new tools for innovative, integrated projects. We close with examples of projects that have the power to extend learning far beyond the classroom.

Talking Books and Stories Told by Elders

Teachers at Tulalip Elementary, in Marysville, Washington, have found that a classroom technology project can also serve to provide young children at home with unique literacy and technology experiences that help to prepare them for school.

When planning for kindergarten registration, staff members brainstormed ideas of what to include in a take-home packet for the pre-kindergartners. The typical assortment of books and magnetic letters came to mind first. But excitement grew when fourth/fifth-grade teacher David Cort suggested putting together a “talking book” of a traditional Tulalip story on CD-ROM. Because the Tulalip Tribes have given each family in the tribe a computer, the CD-ROM would be a resource that could be used by all families.

Supported by the school district and the Tulalip Tribes, school and tribal teachers have been collaborating to infuse more Tulalip language and culture into the curriculum. Some of the non-Native teachers have been taking lessons in Lushootseed—a native language that originated

on the east side of Puget Sound—and teaching it to their students. Until recently, this language was spoken by only a handful of elders. In addition, Cort’s reading curriculum includes reading and retelling traditional Tulalip stories.

Accordingly, in a project that links technology with literacy, Cort’s students are designing the talking book. To do so, they are learning to use Web page design tools. The student drawings of the main characters of the story are artistic in their own right. They were modeled after the traditional Tulalip way of drawing or carving, which was very simple and realistic compared with the more stylized art commonly associated with Northwest Native art. The students’ enthusiasm is apparent as they show visitors the witty animation and sounds they have created for the book’s illustrations—a baby frog catching a buzzing fly, a group of ants marching across the screen, a spider spinning a web around the baby frog.

The talking book tells the story “Owl and Frog,” a traditional story told by Martha Lamont, a Tulalip, and recorded by Thom Hess in 1964. It was transcribed by Vi Hilbert and translated into English by David Cort. The story describes how the owl and frog came to be the animals they are. It uses Lushootseed story features such as repetition and circular figures, sentences that repeat the same idea. These story features not only lend beauty to the tale, but also help listeners attend to the patterns and remember the story better, according to Cort.

The story is told in both English and Lushootseed, with the two languages displayed side-by-side on the computer screen. Each phrase is spoken aloud when a user clicks on it with the computer mouse, and one can hear certain words pronounced again by clicking on them. Students provided the expressive voices for the English version, and Lamont's recording is the voice of the Lushootseed version. There is also an option to hear the Lushootseed version uninterrupted. Featuring a picture of Lamont, this option exudes the feeling of hearing a story told by a grandmother.

Thus, this project integrates literacy, technology, art, and culture into a meaningful activity that benefits Cort's students, pre-kindergartners, and their parents and family members.

Many of the elements of this project can be seen on the school's Web site: www.msvl.wednet.edu/elementary/tulalip_site/index.htm

Connecting With Families and Communities: Enhancing Family Literacy

To help families increase computer literacy while engaging in enjoyable family literacy activities, staff at Richmond Elementary in Salem, Oregon, received grant funds to purchase computers and digital cameras to offer night classes to all families. During structured classes open to four families over a six-week period, parents and children together learn to use the Internet and digital cameras, and how to edit their photographs on the

computer. After discussing their family background with extended family members and researching their family history on the Internet, children and parents decide what pictures and stories to include in their jointly created memory books. Recently, their stories and pictures were displayed at an open house at school and at the Marion County Fair.

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Bilingual assistant Irene Valdivia says, "This is hands-on learning, and they pick it up quickly. And the money that comes into the school goes out into the community. Families take their new skills and help other families. It's their way of giving back."

Continued access to the computers and cameras after school enables families to continue the project after the classes end. One family comes in almost daily to do homework together. "It's impressive," fourth-grade teacher Rawlins says,

"to see the entire family—Mom, Dad, and all their children—making homework a family activity."

This project illustrates the benefits of integrating technology instruction into broader literacy goals. Rather than teaching computer skills or literacy skills in isolation, this innovative project teaches families to use technology as the tool for creating an heirloom that is rich in meaning for parents and children alike. Children's language skills grow as they engage in the activities of talking, listening, reading, and writing in the company of their own extended family members. The decisionmaking that goes into creating the memory books (for example, making choices about which photographs to include, and which stories to tell) offers

children more opportunities to use their language skills in meaningful ways. Making use of the Internet for research connects children with the larger world and opens new doors for using their language skills.

Monsters, Mondrian, and Me

Fourth-grade teacher Lucinda Surber in Palo Alto, California, used monsters as an engaging beginning to an extended collaborative project between classrooms at two elementary schools.

Students at each site worked in pairs to create portraits of monsters, and then composed detailed descriptions of their creations. The students in the partner class attempted to re-create the drawings by following the written descriptions, which were sent to them through e-mail. Then, using computers to scan and exchange images, students compared their original portraits with the re-creations.

Students at each site reflected on their descriptive writing skills by looking to see how closely the reproduction matched the original composition. Students wrote an analysis of why the re-creation succeeded or failed to match the original, and how their partners were helped or hindered by the written description. A class Web page showcases the colorful pairs of monster drawings along with the descriptive and analytical text.

In the Mondrian phase of the project students used the same process of writing, exchanging descriptions, drawing, and reflection, this time starting with a work of modern abstract expressionism. Receiving students attempted to duplicate the art works from the descriptions. The second-generation paintings were compared to the original works for detail and accuracy.

In the Me stage, students studied self-portraits of famous artists and then created their own self-portraits in the style of either Georges Rouault or Vincent van Gogh. During this phase they worked individually to write detailed descriptions of their faces, and then to reflect on the second-generation portraits.

The project uses art and telecommunication to illustrate the need for clear and precise language, and engages students' language skills in many ways. Working in pairs to create the original artwork brings about lively conversations. Student pairs must ask and answer a wide range of questions while imagining and drawing their monsters. Conversations continue as students shift from talking about art to making art to writing about their artwork in a way that describes every detail. Because students know the purpose of their words and that they will be read by an audience, the work and the language take on added significance. On the receiving end, students also work in pairs to make sense of the descriptive writing and turn it into a drawing of their own. Again, students must ask and answer a number of questions about the process in order to create a drawing.

Technology is woven throughout this project. Students use word processing software for writing, e-mail to exchange information, and scanners to turn their drawings into digital images. The project can be viewed online at www.pausd.palo-alto.ca.us/barron/mmm/mmm.html

Celebrating Families

At Cherry Valley Elementary School in Polson, Montana, celebrating the lives of family and community members takes many forms, and often integrates many aspects of literacy—oral, written, and the visual arts. Each year, at a Family Heritage Museum in the school cafeteria, children display the results of their research on their own

family tree. Interviews with parents and grandparents yield rich stories, which the children write and accompany with photographs and illustrations. Recently, the use of technology—including computers for word processing and publishing, tape recorders, and digital cameras—has added to the excitement of this popular project.

For several years, both in multiage groups and with their classrooms, children have been visiting a local nursing home and establishing relationships with one or more residents. Children then

interview the residents, who frequently tell stories about their lives. The use of tape recorders helps students tell the stories, using the words of the residents. In addition, older students take notes. They then write the stories, share them with the residents who make suggested changes and edits, publish the stories, and take them back to the nursing home, where they read to the elderly residents. The project has been met with enthusiasm from the staff at the nursing facility and the residents themselves. A social worker at the facility writes:

I have witnessed contacts between young and old, which can only be described as “touching.” Residents are able to hold a child’s hand or see a bright young smile. They look forward to these visits and are delighted by the children’s eagerness to please and entertain. These intergenerational exchanges are a benefit for both age groups. They nurture an understanding and acceptance of age difference.

From a literacy standpoint, the project is well-designed on many levels. Students know that they will share their products with residents of the nursing home. This makes the project more meaningful—they know their work will have an audience. The project is designed to spark conversations between generations—dialogues certain to



PHOTO BY DENISE JARRETT-WEEKS

expand students' vocabularies and to inform students about their community's history. As students revise and edit their work, they gain proficiency in their skills as writers.

Technology provides the students with tools for recording oral histories, taking photographs, and publishing the results of their research.

Where To Begin?

After hearing these inspiring examples from other classrooms, many teachers may now be wondering, Where do I start? How do I begin to use technology with my students? What do I need to have, and to know?

First, take a deep breath. And relax! You already possess the most important qualities for adding technology to existing classroom resources: You are vitally interested in the learning and well-being of your students, and you have the knowledge and skills for knowing how to meet their learning needs and support their growth. These final pointers offer some basic information that may help you on your journey.

How should I begin?

Start small. Try one new strategy or one new tool. Work with that until you and the students feel comfortable using it, and have found ways that it enhances the lessons. You may wish to start using a camera in new ways to document learning, perhaps having the children take picture of completed tangrams or of a partner's project. Or you may introduce students to using the word processor to draft a story. Later, they can revise the draft and add pictures. If you have a scanner, you can scan student pictures into their stories.

What do I need?

Don't be concerned about needing all sorts of new and expensive equipment. Use whatever you have

available, including the more "mature" computers still found in many schools. If the machine is older than your students, so what? The most common use of computers is still for word processing, and even computers that are many years old continue to be powerful tools. Many teachers use a variety of machines of different ages and varieties. If software is available for your computer, you've got a great resource. (Did you know that Sony PlayStations, MacIntosh Classics, and 386 computers each have more computing power than those specially designed to travel to the moon aboard the Apollo spacecraft?)

What kind of word processor do I need?

Any word-processing program can be used with children. If you already have, or can buy, software that is designed especially for children, that's great. But the differences (between software for children and all-purpose software) are less important than how the program is used. Children's software typically includes color, child-friendly graphics, sound, and perhaps larger-size type. Most adult software includes the same features, except for children's graphics. And as noted earlier, children benefit more from creating their own graphics than from importing canned clip art. The text-to-speech capability can be very useful for students, but it is also available either as part of the operating system or as an inexpensive software add-on.

What do I do if I have very little software (and can't afford more)?

Another common concern is that a class needs to have a lot of software available for students. This is certainly true with library books, and having a variety of resources can be useful. But if the software is mainly used for productivity—writing, creating, drawing, and so forth—then a wide variety of programs is not necessary. The aim is to have available the tools needed to accomplish the task.

Too many choices can actually be a drawback if they distract from the purpose, which is to be creative and to express oneself.

I have very little experience with technology. How do I teach my students?

Of course, most of us would like to know more about computers, software, and the other new technologies. But our students have grown up with them—today’s children are younger than the tools! Kids take technology in all its forms for granted. They are not intimidated and, most important, allow themselves time to explore and play with it. For all these reasons, teachers would be hard-pressed to stay ahead of all students all the time with all technology. Instead, why not celebrate students’ knowledge? Let them lead the way with the “how-to’s” while the teacher leads in providing the “whys.” Working together, students and teachers will find new opportunities to be excited about learning and successful in the important realms of literacy, science, math, and the many other areas that contribute to understanding our world.

You can go as far as you care to on this journey, or let your students carry you along with the tide. Above all, have fun. Remember that positive experiences with literacy have a big impact on children. Don’t overlook the power of example—let kids see adults try new things and learn new skills. Laugh at the problems and celebrate the successes. Your students will be richer for your efforts in this new direction. Bon voyage!