

April 2003 *Interconnect* article

Digital Classroom Project explores the future

Deliver rich educational content in a variety of digital formats, so schools with varying levels of technology can use them. That is one recommendation the Center for Children and Technology (CCT) is making to public television stations in its report on the PBS K-12 Digital Classroom Project, carried out in Wisconsin and other states last fall.

Aimed at public TV stations planning for wider use of digital resources in schools, the report also recommends

- training teachers to work with new digital media,
- supporting innovative design of inquiry-based learning that involves cross-curricular collaboration,
- facilitating research with primary sources in addition to project-based learning, and
- finding ways to make more high quality instructional resources from PBS and local stations available for use across disciplines and grade levels.

Project

The Public Broadcasting Service's Digital Classroom Project involved the Wisconsin Educational Communications Board (ECB) and six other public television broadcasters around the nation. Each worked with PBS and a local school last year to learn how digital media libraries, delivered using various technologies, could enhance social studies learning. In Wisconsin, Madison's Cherokee Middle School received the searchable media library.

PBS released a nationwide project report early this year. Based on classroom observation and interviews with teachers, students, school administrators, and public television station representatives, the findings of CCT independent evaluators explore what participating teachers found valuable, how the various delivery technologies worked, and what this could mean for the classrooms of tomorrow.

Teachers

Most participating teachers around the country used the digital media library for project-based student learning; only a couple offered teacher-led lessons. They liked the variety of searchable resources, found them quite accessible, and liked being able to point out images of primary sources to emphasize their value for research.

The multimodal format of the materials was valuable, teachers said, because the video and audio assisted students with special needs and those who had difficulty reading. They asked that closed captioning be included in any new version of the media library.

A number of participants found it helpful to practice with technologies before presenting them in class and liked to use the new resources in collaboration with other teachers. Some also drew upon their students' technology expertise when this made it easier to manage the classroom and support other students.

Technologies

Participating students and teachers tested three different technologies for media library delivery: CD-ROM, streaming video on the Internet, and local public TV station datacasts of digital content to PBS-supplied receivers linked to each school's computer network. Some participating schools had to upgrade computers or add plug-ins to access the digital media library. All found it crucial to give teachers testing materials adequate technical support.

How did each technology fare? CDs were familiar and reliable, though student use was limited by the number of CDs available. The Internet also was familiar, required no additional set-up, and provided access in classrooms, labs, and even at home. Teachers noted, however, that getting streaming video via a school Internet connection could be a slow process.

Datacasting provided the highest quality video and was definitely the cutting-edge technology, teachers reported. Datacast videos streamed quickly over school networks, though school network capacity became an issue at times. The required technology integration efforts were worth it, one administrator said, because "any tool that will get kids' attention and keep them engaged is great."

The PBS K-12 Digital Classroom Project is funded by the Corporation for Public Broadcasting and the Arthur Vining Davis Foundations. To learn more about Wisconsin participation, see the December *Interconnect*.