

Schools Where Technology

Works for Learning

Video script

September 6, 2002

Canutillo Elementary

The fourth graders in this classroom are using the Internet and a multimedia authoring program to do research for social studies. The software is new to them ... but the process is not. They're comfortable with technology ... and they're comfortable collaborating with their peers. They know all about consulting, compromising and working through disagreements.

At Canutillo Elementary, there's an emphasis on constructivist learning environments supported by technology. In other words, the teachers at this school know they can't deliver knowledge to students. Instead, they must "construct" their own learning ... they find, organize, interpret and present information using technology. And not just any technology. The computer software and other tools they use have been carefully selected to support each lesson or unit's learning outcome.

When you see the degree of responsibility these students take for their education and their easy use of technology, you might be tempted to think they attend an affluent suburban school. They don't. Canutillo Elementary is a public, K-6 school located in a low income community in southwest Texas. Of the 675 students who attend the school, approximately 96% are Hispanic and 3% are white. Most are native Spanish speakers or bi-lingual. Nearly all qualify for free lunch and few have computers in their homes.

Canutillo underwent a major change after the school participated in the Technical Assistance Program – TAP for short – conducted by the Southwest Educational Development Laboratory. Twenty-eight of the school's forty teachers attended TAP training where they learned about technology and its role in constructivist classrooms. Teachers who did not attend were brought up to speed by colleagues who did. Hector Giron, the school's principal is very enthusiastic about "constructivist" approach and the direction the school is taking.

Well, it's progressed from the point where people were how do you turn the machine on, you know? And knowing how to use the simple computer basically for a single application, like [inaudible] or some word processing and it really has changed from that kind of a process to a automating processes, atomicity I think is what I heard a presenter talk about, automating work that you normally do so you're really shifting from one work set of equipment to another to an actual integrative process where you're doing a lesson and your kids are doing research, they're pulling things off the web, they're creating a web class, creating a web page. They may actually research information and put a PowerPoint presentation together.

– Hector Giron, Principal

Constructivist learning environments can be created without technology, but after the TAP training, teachers at Canutillo viewed the two as complementary. To achieve their vision, the school had to make a significant investment in technology and technical support.

Each classroom at Canutillo has three or four networked computers and a printer. There's a small computer lab, a handful of wireless networked laptops and digital cameras. Tech support

is provided by a network technician and a resource teacher who specializes in technology integration.

Software programs – such as Hyperstudio, word processing and PowerPoint, among others – allow students to create products that show what they've learned.

Curriculum goals in Texas are based on the Texas Essential Knowledge and Skills (TEKS) framework. The innovation at Canutillo focuses on instruction rather than curriculum. Students use technology to access information and to show what they've learned.

Teachers at Canutillo integrate technology into lessons as they see fit. The goal is not just to use technology but to use technology that brings added value to the teaching or learning process. In some cases the entire curriculum might be supported by technology.

Since the TAP training, teachers spend more time preparing resources for student use. To create a resource-rich classroom, teachers may gather print materials, download software and bookmark appropriate web sites. They might create computer files or templates that students can use to store the information they've gathered.

Since Canutillo made the commitment to constructivist learning environments supported by technology much has changed. The innovation is schoolwide and involves all curriculum areas. There has been an overall improvement in student achievement on the state's mandated Texas Assessment of Academic Skills (TASS) tests. The use of technology has given students new experiences and allowed them to develop new skills. Because most of them do not have access to computers at home, the impact has been profound. It has made the students more excited about learning and opened their eyes to future possibilities.

Their focus came from the participation in the year-long professional development project. And while they got an enormous amount of support from the professional development project it really their school's commitment to participate, to collaborate with each other, to sustain that activity and learning at the school. This came about largely from the leadership of the principal. But also was supported by teacher leaders at the school and everyone's willingness to participate in that. While professional development provided an enormous boost to their efforts without everyone's efforts and commitment to participate and spend time with that it alone would not have been enough for them.

And likewise they've received equipment and other kinds of influx of money to help them buy things but it's through their focus on what they're trying to do that makes their pursuit of the monies work for them. Because the funders (the places that they apply to) I think recognize that they've got a real commitment and focus to what they want to do with technology. And that's what makes it really work for them at Canutillo Elementary.

--Sara Dexter, Project co-Director

Video Credits

The research for this video series was part of the project “U.S.A. Exemplary Technology-Supported Schooling Case Studies,” co-directed by Ronald E. Anderson and Sara Dexter, at the University of Minnesota.

Funding for the research was received from the U. S. Department of Education, Office of Educational Research and Improvement (OERI). The production of the video series was supported by the U. S. Department of Education’s Preparing Tomorrow’s Teachers to Use Technology Program (PT3) program.

The views and conclusions in the video are those of the project co-directors and are not necessarily those of the U. S. Department of Education.

Special Thanks to the Staff and Students at
Canutillo Elementary School: Where Technology Works for Learning

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