

Schools Where Technology

Works for Learning

Video script

September 6, 2002

New Tech High School

In northern California, there's a quiet revolution taking place. A small high school, located in the city of Napa, is providing students with the education and the skills they need to excel in a technologically advanced world. Students are preparing for post-secondary education. And, at the same time, they're focusing on capabilities that are prized by 21st century employers -- problem-solving, project construction, knowledge management and teamwork.

New Tech High was founded in 1996. A small school, New Tech has just over 200 students in grades 11-12. The school serves students with "average" grades ... students who may have been under-served by other large, comprehensive high schools. Approximately 35% of the students are minority.

The school was established in response to discussions with local businesses. Educators were told that students were not being prepared for the workplace. Business leaders felt that students didn't know what it meant to work on a team, to take responsibility for their own work or to improve their skills to grow with a company. The mandate was clear. Career preparation AND college preparation became the twin goals of schooling at New Tech High.

The district administrators who founded the school believed that a small school could best address students' needs. They fashioned the classrooms after real-world workplaces.

The first teachers at New Tech were chosen from outside the district. All the teachers are committed to exploring and learning new programs or equipment to support project-based learning ... and to prepare students for university work as well as future careers. Largely self-taught technology users, the teachers rely on themselves and one another.

The courses at New Tech are largely interdisciplinary and team-taught. Pairs of colleagues teach interdisciplinary math and science, English literature and history and government and economics classes. A computer applications course, New Media and advanced computer classes in networking and technology management are offered. The content of these courses is organized to address the skills and competencies students must have to graduate in California. These "Expected School-wide Learning Results" specify performance goals.

Instructors install most assignments and course materials on the school's computer system. Students access these and turn in their work by computer. The project-based learning approach of New Tech requires students to work collaboratively and to find solutions to the problems they encounter. Students demonstrate competency and proficiency in real-world skills through a variety of assessment measures including project presentations, daily journal writing and some paper and pencil tests. By working with their peers, students are challenged to find creative solutions to problems they would face in the workplace.

Technology adds value to project-based learning. Yet, technology is not the end goal. It's seen as a tool ... a resource rather than a catalyst.

And I think the technology allows us to, you know, provide the information students need in a different setting and then they come to the plate, you know, a little bit more informed and ready to -- I just get really intelligent first round questions and I think it's because of things that they've already been exposed to through the technology.

--Doug Roberts, Teacher

With a 1:1 student-computer ratio, computer access at New Tech High School is universal. The school has approximately 250 computers, all using a Windows-based operating system. There are four different kinds of computers of various ages and capabilities. The newest and fastest are used in the multimedia design classroom.

At least two classrooms are outfitted with the Tegrity system which provides on-demand video lectures on the Web. All classrooms have video projectors from which one presentation computer's screen could be displayed.

Student achievement at New Tech has been impressive. Over 90% of students go on to attend post-secondary schooling. It's been named a U.S. Department of Education Demonstration site and has received funding from the Bill and Melinda Gates foundation to replicate its curricula and instructional approaches in a number of schools in northern California.

Their access is basically one-to-one students to computers. And yet they're very clear in saying that we are not about technology. We are about students being prepared for after high school. For being able to enter into the world of work or go on to post-secondary education and being prepared to do those things in a very skilled manner. And they just recognize that technology is a part of the world that students are going to enter into. They want them to be able to use it effectively as a tool: they use it as a way to teach students how to collaborate with each other, to learn to put together products that are made by teams---with each student contributing to a part of it; to put together presentations that they have to be able to then stand up and deliver. And so the technology becomes a tool for them to achieve all of the school's mission and objectives.

-- 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
New Tech High School: Where Technology Works for Learning

For further information on this project contact project co-directors
Ronald E. Anderson <rea@umn.edu>
Sara Dexter <sdexter@umn.edu>

Video Producer/Editor: Kate Conners, [4th Canyon Productions](#)

Videographers : Sara Dexter and Bobby Jeanpierre

Script: Teresa James, Sara Dexter, and Ronald E. Anderson

Research Team Members

University of Minnesota

Ronald E. Anderson
Sara Dexter
Bobby Jeanpierre
Karen Seashore

SRI International

Carlos Espinoza
Robert Kozma
Christine Korbak
Raymond McGhee