

## Technology takes role in Chico schools

By ROGER H. AYLWORTH-Staff Writer Chico Enterprise-Record

Posted:

Chicoer.com

CHICO — Computer and Internet technology, with all of its inherent challenges and vast potential, is already a part of Chico schools, and its role is going to be more vital in the future.

That's the message delivered to the Chico Unified School District board of trustees Wednesday night during a workshop on technology, largely conducted by teachers and school administrators.

Science teachers Rachel Iufer, who teaches at Inspire School For the Arts and Sciences, and Ray Barber, who teaches at Pleasant Valley High School, showed the board ways they have combined specialized software, computer video technology and the Internet to give their students personal attention 24 hours a day.

Barber explained teachers have long known that field trips are important educational experiences for their students but they are costly to arrange and take high school students out of other classes.

He said he has developed "virtual field trips" where he takes a group of students to some special location. Using real-time video connections, the other students back in his PVHS classroom can see everything their classmates see. He also records everything that the video sees.

Then he brings the videos into class, along with items the students saw on the field trip. He uses the material to do in-class projects. He uses different students in each virtual trip to give everybody a chance.

Besides the field trips, Barber uses specialized software that allows him to record and post online lectures and presentations. The students can access the lectures anytime they want from home.

Iufer said that after seeing what Barber was doing, she got so excited that she created her own website and began producing her own lectures for the Internet.

That has led to what she is calling "a flipped classroom." She explained that she puts all of the lecture material online and her students watch these lectures for their homework.

The individual student can pause and rewind the lectures to go over any point he or she found confusing.

When they come to class they do problems, and she involves them in "critical thinking" related to the material they had covered at home.

Iufer said the flipped classroom makes it possible to spend much more time doing individual work with her students during class time. "The kids loved it," she said.

The classroom-computer connection is not only a function of high school.

Marilyn Rees, principal of Neal Dow School, said with the help of a \$70,000 grant, students in the first through sixth grades have access to very sturdy, battery-powered computer notebook-like devices called NEO2.

Each student in each class has one of these devices they can use during school. The devices cannot connect to the Internet but teachers can send study material to the NEOs, can grade them when the student is finished and return the item to the student electronically.

Students using the keyboard system can also connect electronically and collaborate on projects.

Anne McLean, a sixth-grade teacher at Neal Dow, said she often disables the student-to-student connection to keep people on task, but she said the devices have tremendous value in teaching math and reading.

Andrea Lerner-Thompson, president of the CUSD board, said Wednesday's meeting was the opening of a discussion on technology.

There was an immediate request from several principals to have Barber and Iufer offer training in their methods to other teachers.

Trustee Elizabeth Griffin said one of the challenges the district will face is finding the money necessary to move forward with technology.

Staff writer Roger H. Aylworth can be reached at 896-7762 or raylworth@chicoer.com.