



Technology Enriched Interactive Learning Environments



By Michael Schenck

Konocti Unified School District (KUSD) is leveraging the power of technology to bring the world of learning into our diverse and geographically isolated schools. Over the past 10 years there has been an ongoing effort to infuse technology into our environment; the progress is beginning to show strong value. At KUSD, we believe that technology, when used appropriately, has the potential to positively enhance the learning process.

Interactive white boards (IWBs) are fascinating children and adults throughout the district. This suite of technology combines a computer, projector, large interactive whiteboard and wireless student response devices or “votes” that allow students to respond to multiple-choice questions, providing immediate feedback and comprehension analysis. When combined with age-appropriate and subject-specific content, these tools create an interactive classroom experience that greatly eases the delivery of differentiated instruction.

Three years ago, the first large purchase and installation occurred, providing two interactive white boards for every school. Several other rounds of purchasing have occurred since that point in time. The most recent was funded through our 2008-2010 EETT competitive grant award of approximately \$180,000. Our fourth- and fifth-grade classrooms all have Promethean IWBs, thanks to this opportunity. The fourth- and fifth-grade classrooms that already had boards in them received new computers, and the classrooms that did not have boards were given computers, IWBs and ActivExpressions, the newest generation of student-response-system (SRS) devices.

We have been able to hire a half-time technician, Chris Budwell, who focuses specifically on the support and upkeep of IWBs, while also providing one-on-one and small-group trainings through the EETT project as well. Chris experiences the power of this particular technology

first-hand as the students and teacher applaud when he repairs a malfunctioning board and it comes to “life.” Chris is integrated into bi-monthly IWB training sessions and Konocti Active Board User Group (KABUG) meetings. Our teachers enjoy this opportunity to work together with other IWB users throughout the district to share ideas while further developing their own skills. As with any technology, successful staff development is the key to effective integration.

Promethean has helped us to negotiate a county-wide purchasing consortium to lower the price of purchasing their technology and has also provided the support of a very effective teaching and learning consultant, Jeanine Thomas, who has facilitated our KABUG meetings at no cost to the district. She is helping us bring the integration of this powerful technology to the “next level” by bringing best practices and effective applications from other schools into our user group sessions.

One of the greatest challenges along our IWB journey has been equipment acquisition, installation and support. Which ever brand your institution may choose to standardize upon, I encourage you to keep in close contact with the manufacturer. Open, honest communication is the key to growth and clarity. The manufacturer knows the details and history of their various sales partners and can help find better options if the initial vendor does not suit your needs. Our initial vendor provided pre-sales, sales, product delivery, installation and training services. Their overall service left much to be desired in the areas of quality, efficiency and total cost. Thanks in part to our honest and helpful Promethean account manager, we have saved substantial time, hassle and money in working with a new vendor and installer in more recent projects.

After several years of trial and error, we have most of the “kinks” worked out of the overall acquisition process. If the technology is not

obtained and installed in a timely and professional manner, the negative impact will be felt by all, and the project will suffer. This is, as you might imagine, a story in and of itself! Please feel free to contact me if you would like further details on the sometimes painful process we have gone through to find the happy balance of today.

You might ask yourself, "That all sounds great. but is this another glorified 'technology for the sake of technology' journey?" To answer that question effectively, let us turn to the classroom where we hear teachers, students and administration very clearly applauding these efforts. Here are just a few samplings of the many successful reports we receive.

Jeannine Fanning teaches eighth-grade algebra at Oak Hill Middle School. She says her students "like that the board provides a brighter, more colorful learning experience that provides examples. They wish all teachers had interactive white boards and enjoy the hands-on opportunity the technology provides." Fanning also uses the board for after-school tutoring in small group settings. "Sometimes the students go through prepared lesson plans and are able to check on their own work."

Students at Pomo Elementary School shared their thoughts about the boards:

- "More interesting than looking at textbooks."
- "Awesome! We can move things around on the board like when we are doing math or dictionary words."
- "Seeing things on the Internet that we are talking about right now."
- "There are Web sites about everything...we can Google anything."
- "Taking tests with the votes and see how we did right away."

Mrs. Peterson likes that "the students are on task, due to the interactivity of lessons." Students in her second-grade class at Lower Lake Elementary said they like:

- "When we get to use it!"
- "Playing the learning games...the interactive gumball math game."
- "The science videos."
- "When we do the votes."

The interactive white board in the Burns Valley Library is used almost every day," according to Sue Betz, the library media specialist. She has found many uses and says, "Right now I am helping the fifth-grade classes learn their states and capitols. I have extended these lessons to include the third, fourth and sixth grades. I use my board for rainy-day lunches. We read stories and play games together. The first and second grades love it."

Martha Miller is the Konocti Elementary music instructor, bringing musical enjoyment to our elementary schools. She has worked with some of our fourth-, fifth- and sixth- grade teachers who have IWBs in their classroom to integrate the Music Notation CD into their music instruction. She reflects upon the impact of this effort as follows:

"Classes with Promethean boards advance at least twice as quickly as students who have to rely on individual books. I think it is because students who are easily distracted can 'tune in' more quickly when the instructor is pointing to the information that is being addressed. When distractible students are left on their own to find the correct page, selection, measure, beat, note, or rest as well as hold their recorder with the correct position, use the correct fingering, exert the proper volume of air flow, at the same exact time as everyone else, they are too far behind the rest of the class to catch up to their peers."

She also says, "We have a large population of distractible students of which the Prometheans are providing a 'leg up' through savvy instruction. Frustration is kept to a minimum and the difference in the students' success is remarkable!"

Martha continues through [the district's] work to acquire, install and train the users of these systems. "You are facilitating educational success for our students! Thank you!"

Greg Mucks, principal of Lower Lake Elementary and director of the EETT Grant adds: "The student response systems take our efforts to guide instruction through assessments to the next level. These devices allow classroom teachers to check for understanding and get specific feedback at any time during a lesson which helps facilitate differentiated instruction. The interactive possibilities truly bring the high-tech world right into the classroom in a seamless fashion. The typical classroom teacher, with a little training and support, can actually utilize this technology without having to learn a completely different style of teaching. This works!"

We look forward to the continuation of such enthusiasm; it brings to light the value of transparent, effective technology resources integrated for the purpose of learning and growth.

The Konocti Unified School District is actively involved in applying relevant resources to better the opportunities of our customers—the students and families in our community. The power of IWBs has unleashed an unprecedented level of enthusiasm amongst teachers and students alike. It is our mission to establish a life-long hunger for learning. Technology inspires students in a medium they understand and can relate to and allows them to readily absorb new information while developing a thirst for knowledge. ■

Michael Schenck is the Director of Technology for the Konocti Unified School District and a proud member of the first class of graduates from CETPA's CTO Mentor Project. With a passion for technology integration and progress, Michael looks forward to the continuing advances in the community's educational systems. He can be reached at michaels@konoc-tiusd.lake.k12.ca.us.