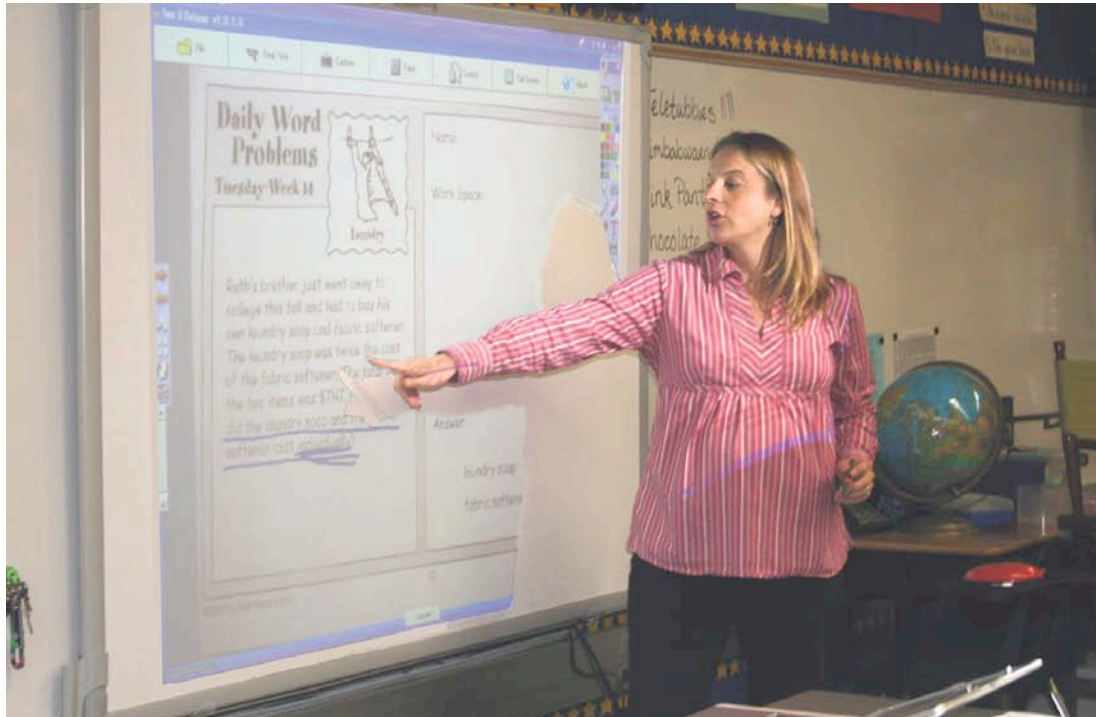


School Blackboards Turn White

By Andrea A. Firth



Los Perales' fifth grade teacher Lindsay Garrity at work at the white board

Photo Andrea A. Firth

Not so long ago being chosen by the teacher to go outside to clap the chalk dust from the blackboard erasers was a task reserved for the best-behaved boy or girl in class each day. Unlike their middle-aged parents, children of the Z generation and beyond will probably never have the opportunity to smack erasers, because today's blackboards do not require erasers or chalk. They aren't even black—the new color is white. The whiteboard is a large, interactive display that connects to a computer, a document reader, and a projector. "It is a user-friendly tool for teachers and students which integrates several different mediums," explains Bruce Burns, Principal of Joaquin Moraga Middle School. "It creates a high level of student engagement, allows for instant feedback to the classroom, and presents educational material in visual, tactile and auditory modalities."

Fifth-grade teacher Lindsay Garrity has been piloting the electronic whiteboard in her classroom at Los Perales Elementary School in Moraga for almost a year. "It's changed the way I teach, because I can show them everything that I want them to see," explains Garrity.

The projector displays the computer desktop onto the whiteboard surface that is shown on a screen. Documents, websites, educational soft-

ware, and streaming video are all examples of what can be displayed on the whiteboard. Alternately, the document reader can be used with the projector and whiteboard to display hardcopy material such as books and worksheets. Using interactive software and a stylus, the teacher can 'write' directly on the whiteboard. The document can then be saved (as an electronic file) and displayed again later or printed and distributed to students. The teacher has access to a color palette for writing and highlighting information, a protractor to create angles, text, graphics, and many other features. In addition, classroom response systems that work via handheld remote controls allow student to answer questions and the results can be tabulated and displayed.

Garrity finds being able to display and write directly on the whiteboard provides her students with a better understanding of the lesson. "It makes my directions much more clear, because I can visually and verbally explain what I am talking about. Plus I can highlight specific things." The application of the technology for working through math problems or editing text are obvious, but Garrity finds that she uses the whiteboard 85% of the time that she is teaching and across all subjects.

And the students, what do they think about

this new technology? "They love it," states Garrity. "Kids are so technologically driven these days. The whiteboard keeps their attention much more. Sometimes they are just looking for me to make a mistake so that they can catch it," she adds with a laugh. "But that's fine. The kids love to come up and use it too."

Several schools in the Moraga School District have embraced the whiteboard and are working with their school PTAs to obtain funding for the technology. One of the biggest challenges to incorporating the whiteboard into schools is the cost—this can range from \$5,000 to \$10,000 per classroom depending on the number of components of the system that are required. For example, some classrooms may already have a laptop computer or LCD projector, which represent a significant cost savings. Currently, Los Perales has six whiteboards up and running; Camino Pablo Elementary has three classrooms outfitted and plans to install three more next year; Rheem School hopes to add their first four whiteboard systems by the end of this year; and Joaquin Moraga Middle School is fundraising to introduce the technology at their school site. Schools in Orinda and Lafayette are also piloting the whiteboard technology on a limited basis as they evaluate the system.