Clear Creek classrooms are getting SMART-er

By Cassi Clark
For the Courant

Sylvia Hakala's third-graders sit on the floor in front of her SMART Board. "Three rows of three," one child says of their organized seating. "Can we play tic tac toe?" asks another. "I want to do the karate guy," a third says.

A student eagerly waits for Hakala to pull a game up on the computer. Two stacked rows of three boxes appear on the SMART Board screen. The student starts tapping the board in the separate boxes, creating piles of blocks in ones, tens, and hundreds. Hakala asks the kids if there should be more blocks in the lower line or upper. They answer "upper," and the girl adds more boxes to the top line.

"Watch this," she says, excited to show off the game. She drags the lower blocks onto the upper ones, making them both disappear.

"Now, how do we write out the answer?" asks Hakala.

"Expanded notation," the kids answer.

The girl counts the remaining blocks in each box and draws big numbers in the lower boxes.

"They really like writing with their fingers," says Hakala.

Classrooms look similar now to 10 years ago, with class-related decorations and student projects, but today Clear Creek students play Internet games as a class, chatter about interactive lectures, watch videos with a mouse click, work on worksheets together, and will soon be answering questions with remote controls, all of which can be saved for future lessons.

Please see **SMART**, Page **16**

SMART

From Page 5

With 400 computers and 44 SMART Boards currently in the district, technology is increasingly a part of Clear Creek teachers' bag of tools and students' education. Thanks to the Clear Creek Education Foundation Inc. and the king-Murphy PTA, every classroom in Clear Creek has a smart board. The CCEF raised $8,100 for the boards and received a 2 to 1 matching grant for $15,000 from the Lillis Foundation.

Back in Hakala's classroom, students take turns making and solving problems, then they move on to tic tac toe for plurals with cheers.

Technological upgrades in the district are aiding teachers in keeping the attention of the computer generation and teaching kids computer skills at a young age. Thanks to the King-Murphy PTA, there are SMART Boards, document cameras and computers in every King-Murphy classroom (except the Spanish room, which Marion Jennings, the SMART Board coordinator, is working on outfitting), and one Airliner Wireless Slate and one Senteointeractive response system.

"(The board) helps keep them so engaged," Hakala says. "This is what these kids do; they play video games and watch TV. They're so much more into technology; to teach them, you have to incorporate it into the classroom."

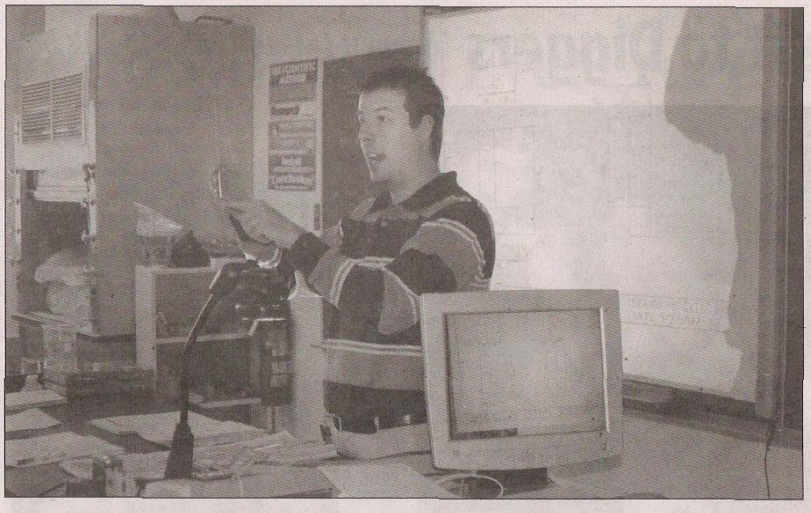

Photo by VICKY GITS | The Courant

Chad Glidden teaches a drafting class Jan. 8 at Clear Creek Middle School. Glidden, who also teaches science, is one of the teachers in the district who uses the SMART Board frequently..

The clickers allow Hakala to ask questions and have each student click in the answer, which is tallied on the board. Instantly she can gauge understanding of the material.

Middle school science teacher Chad Glidden and Hakala eagerly use the new technology, creating lesson plans in SMART Notebook, the board's software, and using websites like echalk, internet4teachers and Jennings' own ikeepbookmarks.com. Hakala has even purchased school memberships to some educational websites. SMART Notebook also comes with numerous lessons and PowerPoint presentations for all subjects K-12.

In Glidden's first-period earth and physical science class, his middle-schoolers provide typical running commentary, but this year their conversation is about his PowerPoint presentations, which he presents on his SMART Board. Clicking on the "Newton's Laws" headline he created, a kid-oriented website describing the three laws appears. He reads the site to the students while walking around the room, coming back to the board, and touching it to move to the next slide. Tapping one picture starts a Spangler's Sciences 9News video demonstrating how to pull a tablecloth from under dishes (Newton's first Law of Motion).

While the video plays, students enraptured, Glidden sets up his own demonstration with a beaker, paper and ball. The next slides have moving icons — a test tube crashing a car into a wall and

Having the lecture, websites and videos in one lesson application saves time in the classroom and keeps the students on task. It also allows teachers to save and adapt lessons each year to minimize planning time. As with Glidden's personalized PowerPoint presentation, Hakala created her own elementary-level critical thinking lesson with six boxes, six shapes and clues to help the students figure out which shape goes into which box. The students take turns dragging shapes into boxes as they work together to figure out the order. She can share this lesson with district teachers or even submit it to the SMART Board company for teachers across the country to use.

"Sylvia is having so much fun with the interactive tools," says Jennings. "She is starting to use (the new) sets of clickers which were purchased by the King-Murphy PTA."

Both Hakala and Glidden assist Jennings and district maintenance in setting up the boards at the other district schools, and demonstrating their capabilities.

Proficiency with the boards varies from teacher to teacher. Using several grants from the Phelps Dodge Corp. for training, teachers use staff development time, release time and in-class training to master the approach. However, some teachers still fear the technology and don't want to mess up the boards.

Jill Stansbury, a math teacher at Clear Creek Middle School, said she doesn't use her board as much as

shattering — they discuss Newton's law that objects in motion will stay in motion until acted upon. The kids crack jokes related to the subject and Glidden's "art."

Then it's their turn to play with the SMART Board; Glidden sits in the back of the room with the wireless slate and calls a student to the board. The student reads a question aloud, then writes the applicable equation on the board using a colored electronic marker. Using the information from the question, he solves the problem (What unit? Glidden asks). From the wireless slate, Glidden uncovers the answer box and shows the student was correct. The rest of the kids sit watching, commenting on the Glidden-esque character in the word problems and helping the student at the board.

"The SMART Board is more fun than worksheets," says Hakala. When she assigned a crossword puzzle above the class level, they worked on it together using the document camera. She projected it with the doc camera onto the SMART Board, and then she was able to save it on the computer for future use.

she'd like because she doesn't have enough time to learn what all it can do, but she does like the built-in timer for timed tests.

At King-Murphy, well-behaved students are rewarded with individual computer time, in Hakala's class usually spent "caring" for the class pet, a stuffed Webkinz frog. As a class, the students answer trivia questions to get KinzCash, which they can use to buy things for Hoppy's virtual home, like a pool and trampoline. The kids can also access Webkinz from home and create virtual pet worlds while learning math, social studies, reading and science lessons.

"The PTA and student council got (SMART Boards) for King-Murphy, and then everyone saw what a valuable tool it was," said Denise Hayden, King-Murphy principal. "So the district worked to get grants to get them for everyone."

In March 2007, the school board approved funding for SMART Boards for all district schools. Document cameras, clickers and wireless slates will be in the budget for 2008-09. Jennings' current project is to mount the projectors on the ceiling at the high school.