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2 SECTIONS

New technology giving St. Francis math students a helping hand

By Rich Winter

Students at St. Francis Middle School are learning their eighth grade math skills through a new interactive computer system. A quick visit of the classroom and it's easy to see that the students love it, and early indicators from classroom scores and pre-STEP tests say their math skills are improving rapidly.

The InterWrite PRS, made by GTCO CalComp uses infrared radio frequency technology to display math problems on a virtual screen in front of the classroom. Students are assigned a clicker, (like a television remote control) to key in answers. For every problem answered, their teacher has instant information about a student's performance.

Ryan Holy Eagle teaches eighth grade math at St. Francis and found the system in a brochure at a conference last year. He thought it would make a perfect fit for students at St. Francis, to make math more interactive and more fun. With the Assistance of the Rosebud Sioux Tribe's Tribal Education Fund, Holy Eagle was able to purchase the system for an estimated five thousand dollars.

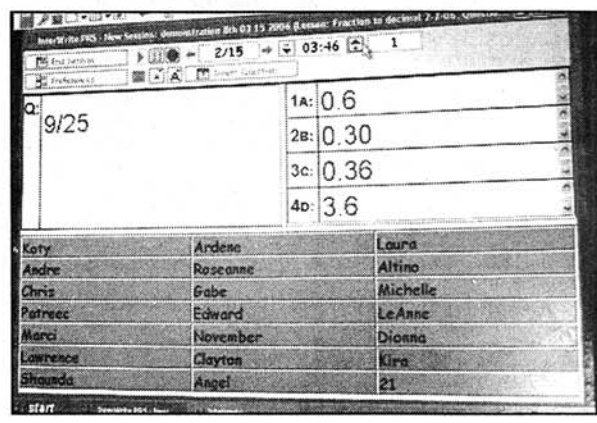
It took some tinkering to figure out how to use the new teaching tool, but with the assistance of a few fellow teachers at St. Francis, Holy Eagle soon had a grasp on his new math assistant.

The system allows Holy Eagle the freedom to move around his classroom. "I can teach from anywhere in the room. I'm not an authority figure to the students anymore. If a student is having problems, I can sit down with them specifically."

Holy Eagle is able to input math questions into the Windows based system, and instantly has a virtual textbook in his classroom. Since the program started on January 18, Holy Eagle's eighth grade class has answered over 800 math questions. He said the new technology almost forces students to pay attention in class. "These kids are so used to instant reward, because of television and the media. With this system, the kids are forced to input an answer. Whether they get it right or not, at least numbers are bouncing off their heads."

Rob Meissner, Vice President of Marketing for CalComp says today's generation of students learns differently than students 20 years ago. "This generation is a group that has grown up with computers and Nintendo. This new technology makes learning active and more engaging."

For every question displayed in Holy Eagle's classroom, he has instant information about his students. He knows immediately who is understanding the subject, who had trouble answering and how long it took certain students



(Photo by Rich Winter)

Eighth grade students at St. Francis Indian School middle school are using an interactive math teaching system.

to answer a particular question. The "clickers" allow students to answer a question with "high confidence," "low confidence" or guess at a question. This allows Holy Eagle to know when students are comfortable with a particular lesson. "As the majority of high confidence grows, we know we have mastered a subject and are able to move on."

Students are able to work math problems out on the screen, or they can use a portable mouse pad to do problems at their desk that still display on the screen for the entire class to see. Meissner said the display board has a grid that senses the pen moving on it. Although the students aren't actually writing on the display screen, it appears like they are.

Holy Eagle said the system has some huge advantages for teachers. "I don't have to take roll anymore. The system automatically registers when a student logs into the classroom. When a parent asks how a student is doing, I have instant information that I can show a parent on a daily basis. I'm able to pull questions from material we have worked on to use in tests. When a test is finished, I have instant information on how my students did."

Administrators at St. Francis won't know how the new technology is affecting these students math scores until the results of STEP testing are completed later this month. Early indications seem to point to a general level of improvement.



(Photos by Rich Winter)

Laura Brushbreaker demonstrates how to do a problem on the interactive screen. (Inset photo) - Each student has a remote control which allows them to punch in their answers instantaneously.