

Interactive Products Division Numonics Corporation Case Studies

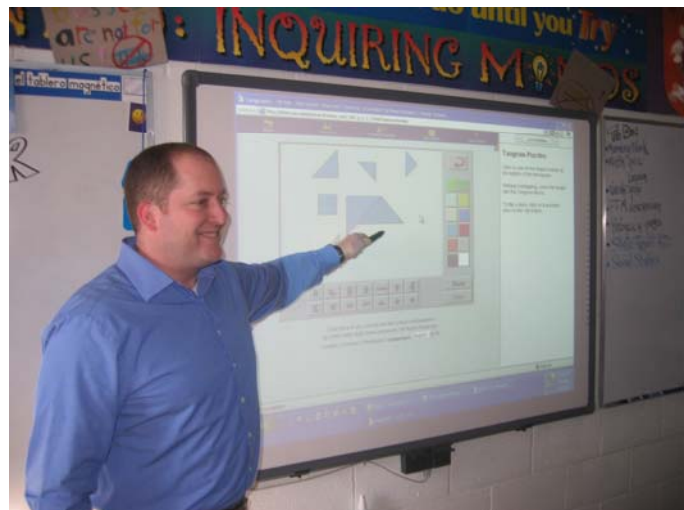


Moorestown Friends School Moorestown, NJ

Case Study by Susan Brooks-Young

Moorestown Friends School (MFS) is a college preparatory Quaker day school in Moorestown, NJ. Founded in 1785, this co-educational school serves 725 students in preschool through grade 12. Nearly one-quarter of the students qualify for financial aid, yet 100% of the members of each graduating class typically complete four-year post-secondary programs. The average SAT score for students in the class of 2006 was 1277, significantly higher than the average for students in southern New Jersey. Many factors contribute to the success of these students. School staff is committed to providing an environment that is both diverse and inclusive. In keeping with the Quaker philosophy of honoring each individual, students from a variety of ethnic, cultural, religious, and socioeconomic backgrounds are challenged daily to respect and learn from one another.

Preparing students to be successful in today's world is a high priority at MFS. This includes providing opportunities for students to master technology skills. In 2005, Academic Technology Coordinator Julie-Ann Morris and the technology department researched the various benefits of interactive white boards in classrooms. They were particularly interested in how this technology impacts students at different grade levels and could improve the communications in the classroom. With support from Al Basilicato, CEO and President of Numonics Corporation and alumni parent and a very successful school auction, MFS was able to acquire 23 Numonics' interactive whiteboards that are currently installed in the computer lab and individual classrooms across grades K-12.



Compatible with Windows and Macintosh computers, the IPM 2000 boasts a 77" screen and 17 Softkeys which are user-definable and may be used to launch web sites, applications, files, keyboard commands as well as 14 different Presentation Tools. When connected to a computer and LCD projector, the IPM 2000 creates a large

interactive projection screen. Teachers provide technology-supported instruction using an electronic pen that controls the computer environment in real time. Special note taking software automatically saves notations and drawings so teachers can distribute them for review.

Luke Davis teaches fourth grade at MFS. Davis is an experienced technology user, and his interest in using interactive whiteboards for instruction led him to volunteer to be one of the first elementary teachers to have an IPM 2000 installed in his classroom. He completed introductory training provided by Numonics and began looking at ways to enhance or expand lessons using the board's features. "I started by getting myself better organized, creating and saving lesson presentations and class notes. Now when it's time for a review, my students and I have fast, easy access to previous material." Davis quickly noticed that student interest and engagement increased whenever a lesson included use of the IPM 2000.

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This observation led him to redesign lessons to permit student use of the IPM 2000. "With all the visual and spatial concepts covered in math, social studies, and geography, it seemed logical to begin with instructional changes in these content areas," says Davis. He found a number of Web-based resources the children could use at school on the interactive whiteboard

and at home on their personal computers such as the National Library of Virtual Manipulatives (<http://nlvm.usu.edu/en/nav/vlibrary.html>) and Google Earth (<http://earth.google.com/>). "Sites like these enable the students and me to manipulate and annotate images in ways that weren't possible before." Davis also discovered that some software programs owned by the school work very well in this interactive environment. "We now use Geometer's Sketch Pad for some activities and multimedia files for our New Jersey unit from a CD-ROM that Scott Foresman produces."

Davis reports that the longer he and students use the board collaboratively, the more he realizes the importance of student-centered learning activities. "This technology appeals to students with a variety of learning styles. It makes it easier for students to see what's being presented, to annotate documents and graphics, and to physically manipulate text and images." At present approximately 30% of interactive whiteboard use in his class is by students and by the winter trimester he hopes for it to be a 50/50 split.

Similar successes are reported in other classrooms at MFS and the school plans to purchase eight additional interactive whiteboards for the 2007-08 school year. Along with the introductory training provided by Numonics, Julie-Ann Morris and the technology department provides on-site support to teachers and Davis lends a hand with on-going professional development for Lower School teachers. An unanticipated benefit of the pilot has

been the increase in collaborative planning among participating teachers and the level of use by less tech-savvy teachers. One staff member who previously had limited technology experience recently volunteered to encourage other teachers to request interactive whiteboards for their classrooms saying, “What did I ever do without this [technology]?”

Impact on teaching:

- Better organization of lesson presentations and notes.
- Increasingly interactive lessons enable teachers to comfortably shift from teacher-based to student-centered instruction.
- Appeals to even more reluctant technology users.

Impact on students:

- Increased mastery of abstract concepts in math, social studies, and geography.
- Easy access to files for content review.
- Engaging for students with a variety of learning styles.