

Interactive Products Division Numonics Corporation **Case Studies**



Numonics IPM Aids in Technology-Supported Instruction at Monsignor Donovan High School

Case Study by Susan Brooks-Young

Monsignor Donovan High School, located in Toms River, New Jersey, is a co-educational Catholic school serving grades nine through twelve. Because it is the only Catholic high school in Ocean County, students come from all over the county and represent a wide range of academic abilities and demographics. Yet, ninety-five percent of the graduating class of 2005 is enrolled in college. One reason for this high level of achievement is the school's emphasis on the importance of blending academics with real world experiences. Three primary goals for the students are the following:

- Routine use of critical thinking, decision making, and problem-solving skills
- Demonstration of self-management skills
- Development of career and workplace readiness skills

Technology-supported instruction is one strategy teachers use to help students meet these goals. Several years ago the school's director of technology, Eliot Perez, became intrigued with the instructional potential of using interactive whiteboards in classrooms. He purchased one and initiated a pilot program with a few teachers. In no time the pilot teachers were sold on the instructional value of the equipment; however, they quickly identified some usability issues,

“When teachers are more willing to use technology in instruction, and students are increasingly engaged in their schoolwork, everyone’s a winner!”

- Eliot Perez

including lack of mobility and a writing surface that did not stand up well under heavy student use. Keeping in mind the lessons learned in this first trial, Perez decided to find an interactive whiteboard that was truly portable and sturdy enough for students to use. A Web search led him to the Numonics Interactive Presentation Manager (IPM) 2000 which has a melamine surface, a material that is almost impossible to damage unlike the

polyester surfaces available on other products. Additionally, Numonics Corporation offers a limited lifetime warranty on its products and is the only U.S. manufacturer located in nearby Pennsylvania.

Compatible with Windows and Macintosh computers, the IPM 2000 boasts a 77" screen and 17 Softkeys which are user-definable. The Softkeys may be used to launch web sites, applications, files, keyboard commands and 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. Teachers and students may write or draw directly on the projected images. Special note taking software automatically saves notations and drawings so teachers can distribute them for review. Perez wrote a proposal for Numonics' annual Educational Technology Grant Program, winning an IPM 2000 for the school.

Christine Mooney teaches technology courses and the yearbook class at Monsignor Donovan. Students enrolled in these classes use a variety of software programs to complete design and editing tasks, making Mooney an obvious choice to pilot use of the IPM 2000. Already familiar with basic operation of interactive whiteboards, Mooney began by using the IPM 2000 to demonstrate the basics of different computer programs used in class. She found that full class demonstrations using the interactive whiteboard helped students quickly grasp and retain software operations concepts. Mooney also discovered that students were eager to use the interactive board themselves to teach one another how to use the programs. As a result, student engagement in classroom activities has increased significantly.

The IPM 2000 is especially useful in the yearbook class where students learn technology skills coupled with English/Language Arts skills such as writing and editing. Mooney regularly uses the interactive technology to help students learn to proofread yearbook copy. Using examples that contain common errors, Mooney walks students through the editing process, making corrections using the electronic pen. The corrected copy is saved and distributed to students as a reference. Once an unpopular activity, Mooney's students are eager to proofread using the IPM2000. Mooney reports, "This strategy is much more successful than methods I've used previously because the interactive nature of the lessons captures and keeps the students' attention." In addition, Mooney finds that student retention of editing basics has increased.

Mooney is developing a library of lessons that incorporate use of the IPM 2000. While the initial development took more time, she is now able to retrieve the saved files, make a few updates, and use the lessons again. Mooney also uses these lessons to demonstrate the IPM 2000 to her colleagues. She reports growing excitement among her fellow teachers as they discuss ways the interactive board can be used to support instruction in their classrooms. In fact, Perez plans to purchase at least one additional IPM 2000 for the 2006-2007 school year.

Impact on teaching:

- Increased use of visuals during instruction supports a broader range of student learning styles
- Written notations and drawings created during lessons result in more complex discussions and greater student understanding of concepts
- Daily modeling of real world use of technology

Impact on students:

- Increased willingness to participate in group lessons
- Now act as peer tutors, displaying a high level of confidence in their own ability to teach concepts to fellow students
- Increased skills in writing and proofreading
- Increased quality in daily work and in long-term projects