

# Interactive Products Division Numonics Corporation **Case Studies**



## Whiteboards Improve Teacher Efficiency at Pope John Paul High School

By Ellen Kollie

“**W**hen Nalline Baliram, chair of the Math Department at Pope John Paul High School in Boca Raton, Fla., first saw an Intelliboard (I-Board) at a teacher conference, she was mesmerized with how the speaker used it and impressed with its many features. “I was both intrigued and curious,” she recalls, “and I started hinting to our technology and administration departments that I really needed one.”

The following summer, Baliram was preparing to write a grant to secure funds to purchase an I-Board when the assistant principal called her at home to tell her that one had been donated to the school.

That was three years ago. Now the high school, which serves 500 students in grades 9 through 12, has seven whiteboards in five subject areas. And Baliram would like to see every teacher equipped with one for many reasons, but mostly because they improve efficiency. “I think it’s a shame that not every teacher has this tool in the classroom,” she says. “Once you use it, you see how much time you’re saving, and it really is user friendly.”

Manufactured by Montgomeryville, PA-based Numonics Corp., the I-Board connects with a computer and projector to integrate education software and an electronic pen in a digital interactive whiteboard to change the way teachers teach and students learn. It starts with the ability to control computer applications and display computer images on the board, which can be done with a mouse at the teacher’s desk. However, because a teacher prefers to maintain control by staying at the front of the classroom, she can use the multimedia pen to control all the computer applications on the board in real time. Specifically, all computer functions are transferred to the multimedia pen, such as opening files, running digital video clips, launching Websites, or downloading free content from the Internet.

Additionally, a teacher can choose a softkey to change the multimedia pen from a mouse to a pen, and thus write and draw on projected images, annotate in color, highlight, and cut-and-paste images in order to improve students’ retention of the material being taught. Note-taking software automatically saves the notations, which is ideal for later picking up where a lesson left off or reviewing before a test. Notations can also be electronically distributed during or after the session.

The I-Board comes with RM Easiteach, cross-curricula software that can be used across a wide range of grade levels. Subject-focused toolbars for math, English language arts, science, and geography provide all the resources teachers need to create compelling lessons and stimulating activities.

Every time a new I-Board is received at Pope John Paul, Rudy Garbalosa, director of Technology, and Debbie Stevenson, assistant director of Technology, do so much more than simply connect it to a computer and projector. “We run wires through the ceiling to connect the I-Board to the computer,” Stevenson says excitedly. “Plus we connect it to a television, DVD player and VHS player. We also buy four commercial-grade speakers and place them in the ceiling. It becomes quite a multimedia event, like in a movie theater, and the teachers get all fired up about it.”

Once they’re fired up, the teachers get busy putting the I-Board to work delivering and enhancing lessons. Religion teacher Leah Davidson uses it for such simple items as vocabulary, visitor sign in and daily announcements. However, she also uses it to capture students’ attention in three unique ways.

The first is creating a PowerPoint presentation that includes a picture (usually gleaned from the yearbook staff) of every student in alphabetical order. The pictures are merged with a second PowerPoint presentation that includes a question for each student and which each student has been given in advance to research. As a picture/question combination appears, that student responds orally, explaining the answer to the rest of the class. “Once I develop a slide show on PowerPoint,” Davidson says, referring to the pictures, “I use it again and again. My principal was impressed when she saw it.”

The second way Davidson captures students’ attention is on Crossword Puzzle Day, where once a week she recreates *Florida Catholic’s* crossword puzzle grid on the I-Board. Then she divides the class into four teams, each of which is assigned a color. She takes turns giving each team a clue, and they fill in the answer on the board with the electronic pen coded to match their team’s color. The team with the most correct answers wins. “They have a lot of fun with it,” she points out, “and it’s the most original way I’ve used the I-Board so far.”

The third unique way in which Davidson uses the I-Board is by showing a daily three-minute meditation or reflection. “I spent all summer researching them on YouTube and Flixxy,” she says, so she has a year’s worth ready at the beginning of the school year.

Baliram also has a creative use for the I-Board, displaying a mathematics visualization software program called Geometer’s Sketchpad. “I use this in geometry when talking about polygons, lines, circles and other visual concepts,” she explains. “When students see them for the first time, they see the big picture – and that’s when geometry comes to life and I see the light spark in their eyes.”

“The teachers are using the I-Boards as whiteboards, but they’re doing so much more with them,” observes Stevenson, who has seen Baliram give up her chalk for the I-Board. “She has really embraced it. And, for a math teacher, that’s unusual, as they’re attached to their chalk.”

Baliram agrees wholeheartedly: “I like being able to save all of my computations and refer to any chapter, section or problem. When my students say, ‘We never learned this,’ I am able to go back and show them on the I-Board that we did. Being able to refer to past lessons is the feature I most appreciate.”

Clearly, using the I-Board for more than its whiteboard capabilities comes with a lot of value-added benefits, which serves the students. For example, Baliram sees that visual learners respond well to seeing concepts in color, which generates enthusiasm for learning. “I have more participation with the

I-Board versus the chalkboard when I ask for volunteers to work problems in front of the class,” she says. Baliram also notices that students are more willing to take notes, that they stay more on task and that comprehension is improved when comparing her use of the I-Board to a chalkboard.

Davidson, too, is quick to point out the I-Board’s value-added benefits. “It gives me better control while students enter the classroom, get settled and start opening ceremonies,” she notes.

Ironically, most of the students at Pope John Paul come from feeder schools that are outfitted with interactive whiteboards. Davidson taught at one of those schools before coming to the high school. “I figured that, if my students are coming from an environment where they’re used to the interactive whiteboard, I should have the same technology,” she says. “In fact it was a student who showed me how to recalibrate the I-Board. They say you can’t teach an old dog new tricks, but that young puppy taught this old dog a new trick!”

Speaking of learning new tricks, Baliram acknowledges her first year with the I-Board came with a learning curve. “Any opportunity does,” she admits, “but, once you get everything in the computer to display on the I-Board, it helps the teacher and the student. For instance, when students are absent, I simply e-mail them the notes at home so that, when they return to school, they’re not copying yesterday’s notes and taking today’s notes at the same time. You don’t realize how much time you’re saving until you use the I-Board year after year.”

What teacher wouldn’t want a little more classroom efficiency, especially if it means improved teaching techniques and more teaching time? Certainly, Baliram and Davidson, along with their colleagues Maureen Singer, Social Studies; Jill Anderson, Social Studies; Lisa Smith, Social Studies; Sue Healy, English; and Maria Grivas, Foreign Language can’t imagine teaching without the Intelliboard.