

Interactive Products Division Numonics Corporation Case Studies



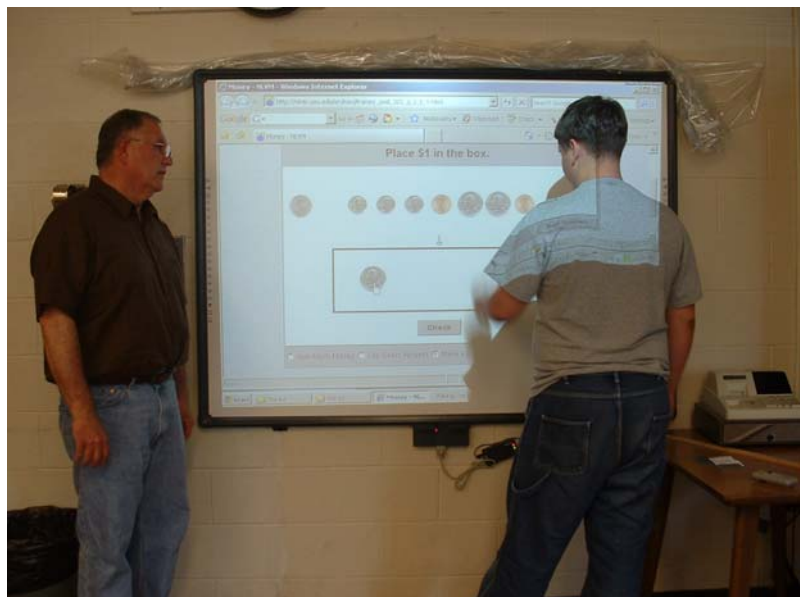
Whiteboard Adds Freshness to the Teach-and-Repeat Cycles Required in Special Education

By Ellen Kollie

The first time teacher Rick Lay saw a demonstration of an interactive whiteboard, he knew it was a tool that would greatly enhance education in his classroom of Mildly Mentally Impaired students at John Marshall High School in Glen Dale, WV. "We have to have one of these," he thought, and set about the task of getting one.

After following the appropriate chain of command, Lay got approval to purchase an interactive whiteboard, with one stipulation: The students would have to be directly involved in the daily use of the whiteboard and its components. He was neither surprised nor deterred by this requirement, knowing it would be another avenue for expanding and channeling the self-direction component of the Marshall County School District's special education program.

An U.S.-made interactive whiteboard from Montgomeryville, Pa.-based Numonics was chosen for Lay's classroom. "It has so many features that it blows my mind," he says. For example, when incorporated with a computer and data projector, the whiteboard becomes a powerful teaching tool. For example, by touching the whiteboard surface with an electronic pen, the teacher controls the computer environment in real time. All program functions are transferred to the pen, thus enabling the teacher to stay in



front of the class without touching the computer. Plus, it is equipped with 17 user-definable Softkeys, located on both sides, that teachers can define to launch web sites, applications, files, keyboard commands and 14 different Presentation Tools.

Next, Lay went online and completed Numonics' free interactive whiteboard (instructor led) training program, which provided a better understanding of the whiteboard's major features. Shortly after the school year began and the whiteboard was installed, Lay's students began in-house training. "We trained for approximately three weeks," he notes. "Each student went through each training session, receiving hands-on experience with the whiteboard and its components."

The training only confirmed Lay's belief that an interactive whiteboard would enhance learning. "After the training, I knew one thing for sure," he says. "Special education students could use a Numonics' whiteboard. The learning curve was no greater for them than it was for me or the classroom aide."

Lay's next challenge was to learn how to incorporate the whiteboard in the classroom to maximize its effectiveness. "I knew we couldn't use it as just another chalkboard or overhead projector," he emphasizes. Not surprisingly, he had no trouble finding ways to incorporate the interactive whiteboard's use, so much so that it is now the classroom's central

“Even with everything we’ve done, we’ve only scratched the surface of what the whiteboard can do. It is the most powerful tool I’ve ever had in the classroom and it has opened a whole new way of looking at the classroom.”

component for delivering instruction. In fact, there are three main ways in which it is being used.

The first is through direct daily use by Lay, the classroom aide and students for both large- and small-group instruction. For example, by connecting the interactive whiteboard to a document camera, it is used to introduce the activities for each period of the day, which he says has greatly improved classroom organization. Then the writing(annotation) tool is accessed to deliver daily education in such areas as spelling, check writing, cardinal numbers, job applications and more.

Lay especially appreciates that he can make annotations directly on the whiteboard, save them and then play them back when needed to reinforce a specific concept. "It's a nice feature for recalling the activities we've done," he stresses.

The second main way the interactive whiteboard is used in Lay's classroom is to access specific applications to deliver instruction, including Word, RM Easiteach, PowerPoint, United Streaming, Sherston Art and Kidspiration. Using these programs through a computer is ideal for individual instruction but, when they're connected from the computer to the whiteboard, they're easily visible to the entire class.

"Our students have trouble decoding words," Lay explains. "I type our spelling words into the computer, transfer them to Easiteach and review them on the whiteboard. It's easy to see, and we can print out study sheets for independent work."

The final way that Lay uses the whiteboard is to access interactive Websites for both small- and large-group instruction. Some of the specific subjects he's covered in this area include math, time, money, cursive writing, health and maps. One he appreciates is Unitedstreaming, a digital video-on-demand service from Discovery Education. "Our curriculum is functional," says Lay. "We call up videos on such topics as job interviews, job applications and checking. More importantly, being able to access interactive Websites saves money that would be spent on curriculum, and there are hundreds from which to choose."



"I have an 11th-grade student who simply could not grasp the concept of measurement," Lay recalls. "We found an interactive Website that teaches measurement. That student can now measure, including half-inch and quarter-inch, and he understands it. I believe it's because he was able to self-direct and absorb the concept on the user-friendly whiteboard."

After instruction is given on the interactive whiteboard, it is continued through either seat work, which sometimes includes more

whiteboard opportunities, or Monarch Station, which is a computer lab. "Much of the three areas listed above can be transferred to Monarch Station to allow for individual work on activities across the curriculum," Lay points out. The technologies working together provides students the curriculum reinforcement they need, while keeping the delivery fresh.

At the end of his first year using an interactive whiteboard, Lay observes that it has made the classroom experience much more productive. "I attribute this to the daily use of the whiteboard in conjunction with an improving use of other technology in the classroom," he says. "And the goal is to continue to improve productivity by making the curriculum transferable across all the classroom technologies, which will especially benefit my students, who require a lot of teach-and-repeat cycles."

In addition, Lay notices positive changes among his students. For example, they are more interested because they're directly involved with the day-to-day operation of the interactive whiteboard and its components. They are more involved in all class activities, as the whiteboard can be used in conjunction with literally all class activities. And, as an added bonus, their behavior is improved because of the interactivity of the whiteboard and the connectivity it permits among the various activities that occur. "We have had few behavior problems this year because the students are not stuck with paper and pencil," he says simply. "We can change and adapt the activities to keep up their interest level."

Lay is excited about continuing to discover ways to use the interactive whiteboard in his classroom. "Even with everything we've done, we've only scratched the surface of what the whiteboard can do. It is the most powerful tool I've ever had in the classroom and it has opened a whole new way of looking at the classroom," he concludes.