mimio®

Granby Elementary School, Columbus, OH
MimioClassroom transforms a teacher and his students

Granby Elementary School is located in the Worthington City School District in Columbus, OH. There are nearly 450 students in kindergarten through grade six. Approximately 34 percent of the students are eligible to receive free and reduced lunch prices.

Darren ("Mike") McGuire, a fifth-grade teacher at the school, had no idea how he and his classroom were about to be transformed when he was given his MimioTeach™ interactive whiteboard three years ago. Before that, he had four older computers in the classroom and admits that he was not very tech-savvy. But that was then.

Today, McGuire's classroom is a technology port that includes his laptop computer and two MimioTeach bars with MimioStudio™ classroom software – one bar is installed on a large whiteboard at the front of the classroom, and a second is connected to a whiteboard that rotates on a table in the back of the room. He also has a MimioView™ document camera, a MimioPad™ wireless pen tablet, a MimioVote™ assessment system, and a MimioCapture™ ink recorder. His students sit together in groups of six at whiteboards turned into desktops. Each group also shares a 32-inch computer monitor, to help them work more effectively.

McGuire has between 25 and 30 different students come through his classroom every hour. He makes sure the MimioTeach bar at the front of the classroom is on and ready to go when the students walk in.

"I didn't know what I was missing, but now I can't imagine what teaching would be like minus Mimio," McGuire says.

> **"I believe the Mimio[Classroom] has made me a better teacher. But it also has made my students better 'teachers.' ...I see my position now as more of a facilitator, while my students have taken on the role of collaborating, coaching, and instructing each other."**
>
> — Darren "Mike" McGuire
> Fifth-Grade Teacher, Granby Elementary School

Teacher-led, student-centered learning

McGuire believes that getting the students involved in their learning is vital. Typically, the day begins with McGuire posting the students' learning targets or questions that will be covered for the day. These queries get students thinking about how their day will unfold, and what specific topics they'll be focused on.

"My students are fascinated by technology, but I have had to make sure that the lessons I create for them are genuinely interesting so that they want to become engaged with them – whether I'm sharing language arts, math, or science content. I have found it's essential to include as many activities as I can where the students are coming up to the board or operating it with the MimioPad and conducting the lessons themselves. This is where technology has become such an integral part of teaching and learning for all of us."

The new style of teaching that McGuire has incorporated into his active classroom has made all the difference in teaching, learning, and achievement

gains. He reports that the MimioClassroom™ solutions have played an important role in driving student inquiry, discovery, and learning.

"Using the MimioTeach forces me to always ask myself, what's the best way to teach this? How can I get the students involved? I'm constantly thinking through these effective teaching aspects ahead of time," he says.

During instruction time, McGuire uses the MimioTeach interactive whiteboard to demonstrate concepts in visual and graphic ways. He even explains math operations by using pictures, conceptuals, and models found in the MimioStudio Gallery and ActivityWizard. For example, when teaching line plotting, McGuire substituted football helmets for the "dots," for visual interest and relevance.

"The students created a pictogram using the helmets, which was far and away more interesting than dots on a line – and it made learning math more fun," says McGuire. "When you start to incorporate colorful graphics into something ordinary – like establishing the mean, median, mode, and range – the students retain the information better. The interactive whiteboard fits so well with this curriculum, and it opens the students' minds to recognizing different ways to solve the same problems."

Whether McGuire's students tackle problems individually or in small groups, the interactive technology leads to cooperative and collaborative learning. After the students have worked through a problem or series of questions, the MimioTeach interactive whiteboard becomes the focal point for whole-class discussion, review, or re-teaching, providing the perfect venue for individuals or small groups to present strategies and solutions to help their struggling classmates.

"I've found that my students are learning how to be better problem solvers and risk takers. When I'm teaching language arts activities, I can show one student's work to the entire classroom via the MimioView, and students begin to suggest ways that student could improve. They aren't afraid to toss out ideas that previously they might not have shared."

McGuire even had one student create and teach a grammar lesson on "Me versus I." The other students
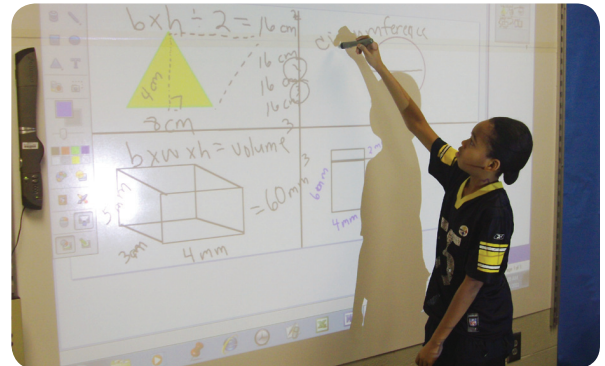
demonstrated their understanding of the concepts by using the MimioVote assessment to respond to questions. At other times during the lesson, students came to the board to place the correct answer in the sentences highlighted on the interactive whiteboard.

"It takes courage to get up in front of your classmates and teach them, but it also demonstrates how easy this solution is to use," says McGuire.

Collaborative learning adds up to improved scores in math

It's that ease-of-use that has McGuire hooked on the powerful technology and its standout features. But it's the students' comprehension of the subject matter presented that has him most excited.

McGuire notes that the students used to just memorize materials and promptly forget the information after a test. But with his new building-block approach of teaching, sharing, collaborating, and encouraging them to stretch themselves, the students now apply previous learning in order to solve the next set of problems presented. The new teaching style is making an impact on student achievement.

"Our Ohio Achievement Test (OAT) scores rose steadily year-over-year, from 63 percent proficient to 79 percent, in four years. In 2011, the state average was 66 percent," says McGuire. "The difference in my mind was the effective and consistent use of the Mimio interactive teaching technologies."

McGuire concludes, "Mimio has made my classroom come alive. My students are excelling at an incredible rate, and I, too, am more engaged and improving. Life without these incredible interactive tools now seems almost impossible."