Montgomery County Community College

Integration of SMART products helps build flexible learning environments

Mathematics professor Roseanne Hofmann helps students visualize abstract concepts on the SMART Board™ interactive whiteboard.

"Every budget cycle, we go out to the faculty and academic administration in general and ask about their technology needs for the next year. Invariably, each year, the thing that seems to float to the top is that they want more SMART Boards."

Susan Hauck, Director of Instructional Technology

Whether students learn through distance education or in the traditional classroom, they will find the pedagogy to suit their needs at Montgomery County Community College (MCCC). The college offers open admission to students and prides itself on providing a cutting-edge educational technology environment that will prepare students for the current technology-based workforce. "I think what the college is trying to do is to provide different modalities to address different learning styles," comments mathematics professor Roseanne Hofmann. Voted among the top five most Wired Colleges by *Yahoo! Internet Life* magazine, MCCC now has

SMART Board interactive whiteboards in over 75 classrooms at its central campus in Blue Bell, Pennsylvania, and 32 at the west campus in Pottstown, Pennsylvania. Servicing 30,000 credit and noncredit students from varied backgrounds with an average age of 27, the college wanted to diversify its teaching methods and improve course offerings to create more flexible learning environments.
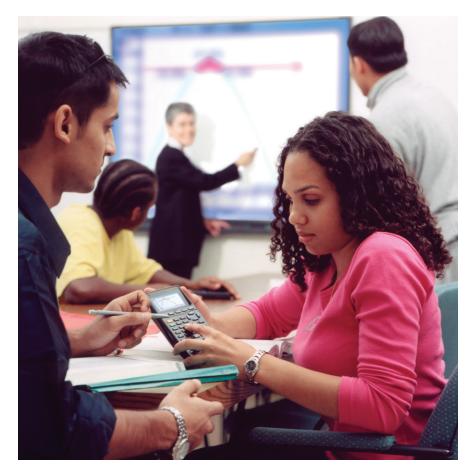
Largely as a result of professor demand, the integration of nearly 110 SMART Board interactive whiteboards has happened in little more than five years. In 2000, Hofmann returned from an educational technology conference convinced that she wanted a SMART Board interactive whiteboard. Hofmann was initially given an electronic whiteboard but found it difficult to use. Two semesters later, she was successful in her quest for a SMART Board. "February 2001 … February 14 was the exact day. And it was a sweetheart of a day!" The trend she started hasn't slowed down since. "By the end of that semester, everybody wanted one…. There is a big difference between electronic whiteboards and SMART Boards," says Hofmann.

Susan Hauck, director of instructional technology and self-described technology evangelist, notes that the large-scale demands for training on, support with, investment in and integration of SMART Board interactive whiteboards started from the ground up. "Every budget cycle, we go out to the faculty and academic administration in general and ask about their technology needs for the next year. Invariably, each year, the thing that seems to float to the top is that they want more SMART Boards," she explains.

In *smart classrooms* equipped with PCs, projectors, DVD players and VCRs, the interactive whiteboards and SMART Podium interactive pen displays help instructors create dynamic learning situations that encourage active student engagement.

When teaching multimodal learning styles in flexible environments, Hofmann videoconferences between the central and west campus and also to a local high school. Students write directly on the interactive whiteboard at one campus and participate in real time. "I can get students who are at the remote site to write, and then students who are face to face can see it. So, it is truly interactive."

Students share her enthusiasm for the integration of technology products. Richard A. Golden, a math student pursuing an associate of science in business administration degree, says "the college is getting better and better at using the technologies available by designing and structuring classes that make learning the subject easier than ever." As someone who is also raising a family and working part time, Golden appreciates the flexibility the technology has given him – "the opportunity to further his career ambitions and earn a college degree."

Math student Kathleen Sapio says the "visual aids are really the key to helping one to understand the more difficult problems, and the study materials that were made available were terrific." She praises the "strong starting point for the next algebra course and additional math courses" that she developed through the use of integrated technologies.

Students use graphing programs that are compatible with the SMART Board interactive whiteboard.

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Roseanne Hoffmann, Mathematics Professor

The SMART Board interactive whiteboards enable professors to offer more streamlined lessons. Using SMART Notebook software, Hofmann and other math professors can write or type in the lengthy problems ahead of time, and recall and revise for future use. "When the students come in, you can just say, here's the problem, let's read it and then start to pick it apart, instead of waiting five minutes for the problem to be written on the board," explains Hofmann. Rather than spending all their time writing notes, students can relax and participate more fully in the class. Class notes are then saved and posted on Blackboard Academic Suite™ or on the professor's website for students to review.

The SMART Board is compatible with many third-party software packages. Hofmann uses a graphing calculator and supplementary homework packages, such as MyMathLab and Eduspace®. She integrates the SMART Board and SMART Notebook software with ScreenWatch™, which lets her capture and record the audio, video and notes for the entirety of her lectures for students to review online. New polling systems allow her to quiz and gauge student understanding before moving on to a new topic, and she is testing the new SMART Response interactive response system because of its seamless integration with existing products. To equip its new Advanced Technology Center that opens in fall 2008, MCCC also has ordered 13 of the new SMART Board

600i interactive whiteboard systems with integrated projectors, and 2 more 690 series interactive whiteboards.

MCCC's faculty look to SMART to provide innovative and fully integrated technology products to meet the needs of an ever-growing and changing student population. Both Hofmann and Hauck feel confident that with technology integration and blended-learning models, the college is remaining true to its mission to provide high-quality education for those who otherwise might not have the opportunity.

SMART Stories