

# University of Tennessee, Knoxville Campus Knoxville, Tennessee

Standardization on SMART products enhances student experience

"One of the things students look at when they are deciding what college to attend is what kind of technology does that college have," says Dr. Michael Burke, a technology integration specialist with the Innovative Technology Center at the University of Tennessee, Knoxville. "Certainly they are expecting technology in the classroom. That's a given. They would be dismayed if technology wasn't in the classroom."

At the University of Tennessee, the technology that students are exposed to is SMART – the SMART Board interactive whiteboard and Sympodium interactive pen display, to be precise. The university has 163 classrooms that are enhanced with SMART products, including 127 that are fully equipped with a Sympodium interactive pen display, a SMART Board interactive whiteboard, Internet access and other technology tools. In fact, given the proliferation of technology-enhanced classrooms on the Knoxville campus, Burke believes it would be impossible for a student to get through a course of studies and not be exposed to SMART products.

The first SMART Board interactive whiteboard appeared on campus in 1998, and now, some ten years later, SMART products are the norm. Burke maintains that it was the inherent flexibility found in this technology that led the university to standardize. He explains, "The reason I supported our standardization on SMART Technologies is that I think giving our instructors the ability to interact with visual materials reinforces the memory of students.... Many learners need that visual."

When instructors and professors use these SMART products to their fullest potential, students win. Using SMART Notebook software, instructors can organize their lectures, notes, visuals and other materials – by doing so, they become free to concentrate on instruction, capitalize on teachable moments and more readily monitor student response and understanding.

.....

## Challenge

Create cutting-edge, technologyenhanced classrooms to support and enhance student learning.

### **SMART** solution

Sympodium<sup>™</sup> interactive pen displays and SMART Board<sup>™</sup> interactive whiteboards

### Case result

Students are immersed in a technology-rich learning environment, which leads to improved student engagement and communication.



For example, John B. Riley, a professor of agricultural economics, uses the Sympodium interactive pen display to better demonstrate calculations and graphing to his students. "The Sympodium is a great tool to have in the classroom. I make sure all of my materials go through the Sympodium whether I have plans to use them for a particular lecture or not because the Sympodium gives me the freedom to be spontaneous as need arises," he says.

SMART products enable professors and instructors to easily annotate and mark-up their presentation materials during lectures, a feature they particularly appreciate. Art history instructors, for example, use digital ink to point out specific details on images of paintings or other works of art.

"The SMART Board and the Sympodium allow instructors to use richer media, and that is very important," explains Burke. "About 50 percent of the instructors I've trained seem to be most appreciative of the fact that they now have the ability with Sympodium to take whatever they've done in class, including their in-class annotations, and package and post them to their course website for their students to access at any time."

This access allows students to review, study or catch up on their own time. Knowing an instructor will be posting lecture notes and presentations frees students from specifically focusing on note taking during their classes and enables them to concentrate on the presentation. They can unreservedly ask questions or take part in discussions.

An ever-increasing focus on student-led presentations has also meant a high level of student support for technology-enhanced classrooms. As a result, the University of Tennessee created two practice presentation classrooms where students use the same SMART products as their instructors, preparing presentations on the very equipment they will encounter in the classroom. Giving students the opportunity to actively hone and sharpen their technology skills makes their transition to the world after college that much easier.

Burke explains, "We try to associate our technology with real-world applications. We're not doing technology because it's cool – we're doing it because it helps our students and staff communicate in the 21st century. A lot of our focus is on us supporting the tools that allow better communication."

That focus is paying off for the University of Tennessee. It was ranked in Kaplan Publishing's latest guide to colleges as one of the nation's top 25 cutting-edge schools. Additionally, in its 2008 America's Best Colleges ranking, the U.S. News and World Report placed the school in the top 30 percent of national public universities.

"Technology provides us with a whole tool set of rich media elements that we would not otherwise have. We believe that visual imagery enhances learning and supports retention. So, the visual aspects of SMART technology products are very important for reaching our students with different learning styles," says Burke. He adds, "The communicative aspects of technology, the ability to reach beyond the classroom, to time shift, the ability of your students to go back and review that material multiple times before the midterm – those things are important. The technology supports teaching in that way. If you start with good teaching and you add good technology, that's when you fly."



Use of the Sympodium interactive pen display in technology-enhanced classrooms campus-wide has led to improved student engagement and stronger communication skills.

"Technology provides us with a whole tool set of rich media elements that we would not otherwise have. We believe that visual imagery enhances learning and supports retention. So, the visual aspects of SMART technology products are very important for reaching our students with different learning styles."

**Dr. Michael Burke**, technology integration specialist, Innovative Technology Center, University of Tennessee, Knoxville

# About SMART

SMART Technologies ULC is both the industry pioneer and a global market leader in user-friendly interactive whiteboards and other group collaboration tools. SMART products include the award-winning range of SMART Board interactive whiteboards, interactive response systems, pen displays and digital signage as well as wireless slates, conferencing applications and software. SMART products are designed to meet the requirements of today's education and corporate environments. Teachers can access and share the information they need to improve student learning outcomes and streamline lesson planning. The SMART Board interactive whiteboard is used to teach over 18 million students in more than 600.000 classrooms in more than 100 countries around the world. SMART's education customers include New York City Board of Education (U.S.), Oxford University (UK), Kobe City Board of Education (Japan), Barnier Public School (Australia), University of Ottawa (Canada), United World College (Singapore), Stephen-Hawking-Schule Neckargemuend (Germany), Florida School for the Deaf and the Blind (U.S.) and Harvard University (U.S.).

SMART is a private company founded in 1987. Employing more than 1,100 people, SMART is headquartered in Calgary, Alberta, Canada, with assembly facilities in Ontario and offices in Bonn, Paris, Tokyo, Shanghai, New York City, Chicago and Washington, DC. SMART has been issued and maintains a broad portfolio of patents with numerous U.S., Canadian and other patents pending. In 1992, SMART formed a strategic alliance with Intel® Corporation that resulted in Intel's equity ownership in the company. SMART products are sold through resellers worldwide. To learn more about SMART, visit www.smarttech.com.



#### Phone +1.403.245.0333 • Fax +1.403.228.2500 • www.smarttech.com

© 2008 SMART Technologies ULC. All rights reserved. Sympodium, SMART Board, smarttech, the SMART logo and all SMART product logos are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. All other third-party product and company names are for identification purposes only and may be trademarks of their respective owners. Printed in Canada 06/2008. 1825-SBP