

# Hardware Reviews

By J. V. Bolkan

This month, *L&L* reviews two devices intended to foster whole-class learning.

## SMART Sympodium ID250

The Sympodium ID250 is an undeniably cool product that has enormous potential for virtually any classroom. It is also a product that seems to be on the verge of being swamped by the emergence of affordable slate and hybrid tablet computers. (*Editors note:* See “Exploring Tablet PCs” on p. 16.)

Basically a 15" LCD panel monitor that you can electronically draw on, the Sympodium essentially turns any computer (PC or Mac) into an ink-enabled tablet. Using your existing video connector and a serial or USB port, the attractive Sympodium and the supplied software are a snap to install. In less than 15 minutes, we had the device running and were experimenting with drawing on top of our Windows screen.

Obviously, an ink-enabled screen is fantastic for annotating and highlighting specific areas during presentations, Web explorations, and virtually any other computer content you might share with students. Just as obvious, a 15" display is woefully inadequate for even a tiny classroom to share. Fortunately, the Sympodium includes a pass-through connector for adding a projector or larger monitor.

Unlike an interactive whiteboard, you can face your students while using the Sympodium, a key advantage. As with most interactive whiteboards, you can save your annotations, notes, drawings, and other marks into an electronic file for distribution either

SMART's Sympodium ID250 does nearly everything right, but there may be better options.



through a network, the Web, or in printouts.

Outstanding potential doesn't always translate into effective usability, but the Sympodium is easy to live with. Although better and bigger flat panel monitors are certainly available, the image quality is quite good. Its native 1024 × 768 resolution is typical for this size, and the brightness and contrast are excellent. I did notice considerably more glare from the screen than a typical LCD, due to the thick, protective writing surface. This is common for tablet-type screens. An easily adjustable stand enables you to angle the display to avoid glare, but bright lights over your shoulder will cause some problems.

The tethered pen is light, truly pen-like, and has some mouse functionality (double-clicking with the stylus tip and press and drag). Accu-

racy and speed are excellent. I could not move my hand fast enough to outpace the Sympodium, and my shaky handwriting was reproduced in its jagged authenticity. Switching between pen colors and the eraser is easy with four clearly marked buttons at the top of the monitor. The mouse mode, an on-screen keyboard, screen capture controls, setup, and more are also easily accessed through another set of buttons at the bottom of the unit. When not in use, the stylus fits into a recess on the side.

The software is almost as easy to use as the device. SMART's Smart Board software for the Sympodium is essentially the same application used in the company's successful line of interactive whiteboards. I did find a minor problem with one computer that was outfitted with an onboard television tuner that was set to display

a television image “always on top.” Within minutes of beginning the television display, the computer froze. Turning off that feature fixed the problem.

Fixing the Sympodium’s real problem isn’t that simple. At \$2,499, it is an expensive piece of equipment. Inexpensive slate and hybrid ink-enabled computers can be purchased for nearly \$1,000 less, and even the high-end hybrids are only a bit more expensive than the Sympodium. Virtually anything the Sympodium can do, these new generation laptops can

do as well, including outputting to a projector and saving screens and annotations. In addition, they are full-fledged computers and portable. The Sympodium requires a computer and must be plugged into a power source.

The Sympodium does offer some benefits compared to a self-contained tablet PC. The most obvious is that the Sympodium can easily be shared between classrooms without requiring you to reconfigure all the software on your computer. Additionally, although the latest generation of tablet PCs are quite powerful computers,

the Sympodium can be connected to inexpensive desktop computers with considerably more power, storage space, and connection options.

The Sympodium is an excellent product that can make a huge difference in how you interact with your students. Although there are alternatives that might be better choices, it certainly deserves a close look to see if it is the right choice for your situation.

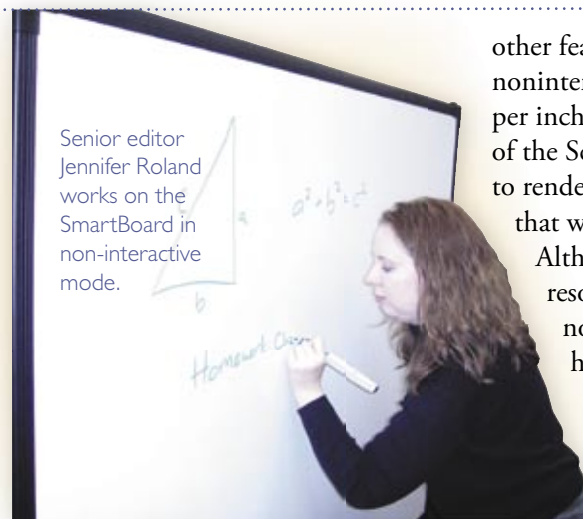
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## GTCO Calcomp InterWrite SchoolBoard

The InterWrite SchoolBoard 1000 Series is an interactive whiteboard that comes in either 60" or 77.5". We had the opportunity to evaluate the larger version in our editorial offices. In addition to choosing the size, you can also specify whether you want Bluetooth wireless capabilities. We did not test the Bluetooth capabilities. All models come standard with USB and serial connections.

When used with a projector connected to a computer, the SchoolBoard is fully interactive, allowing you full control of the computer through the special pen.

Our initial testing focused on the basic electronic whiteboard functions. Installing the included InterWrite software on our PC was easy and quick. We connected the board with the included USB cable, performed the simple calibration exercise and within minutes we were scribbling on the vast expanse of the board and watching our doodles appear on the computer monitor. Immediately, we noticed a problem. Although sensitivity and speed seemed very good



for some of us, others had problems. At first it appeared that the device had trouble following the pen movements of left-handed writers (both senior editors are so gifted). Our right-handed colleagues would write something on the board and it would reproduce perfectly on the computer screen, but our writing had gaps, as if the pen were running out of ink. After much experimentation, we noticed that the left-handed writers were “bracing” the edges of their writing hands on the board. Correcting this fixed the skipping problem, but neither of us felt comfortable writing in that manner.

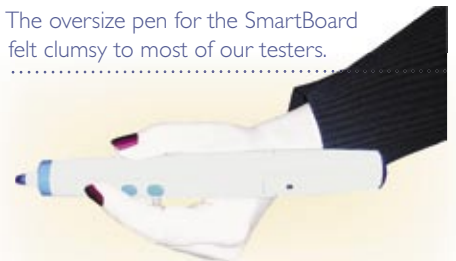
With our skipping problem resolved, we set out to test the limits of the resolution and to check the

other features of the board in its noninteractive mode. At 1,000 lines per inch, the electromagnetic sensors of the SchoolBoard were easily able to render any characters we wrote that would be legible to students.

Although the device has good resolution, it is important to note that a computer screen has considerably less resolution and very small figures on the whiteboard may not reproduce accurately on the computer.

Regardless of which hand they preferred, all users expressed a level of dissatisfaction with the pen. The buttons intended to switch functions are awkwardly placed and were all but impossible to use while gripping the pen in a writing pose. The included dry eraser on the end of the pen is much too small to effectively delete more than a letter or two. More important, and much

The oversize pen for the SmartBoard felt clumsy to most of our testers.





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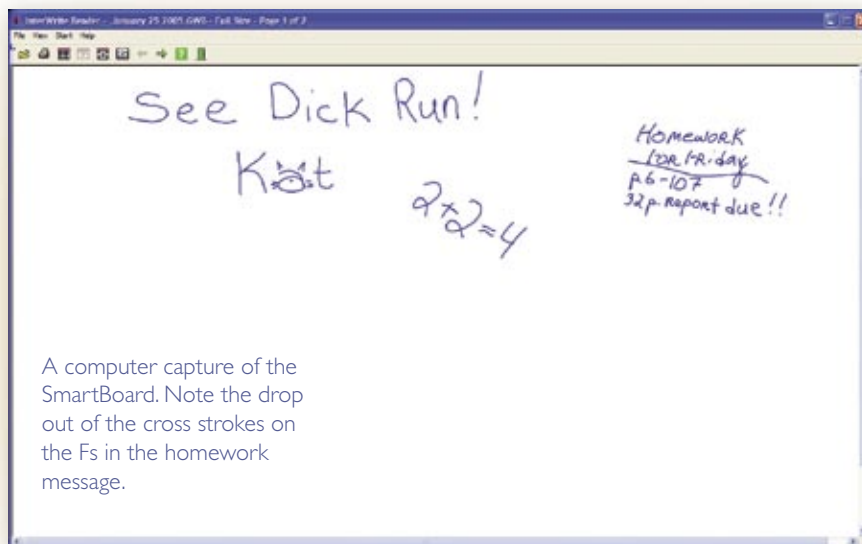
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more frustrating was the relative inaccuracy of the eraser. Removing the ink from the physical board with the tiny patch was tedious, and even when all the ink was removed, we found much of the text still existed in the electronic version on the computer screen.

Interactive mode was more effective. The whiteboard accepted the projected image well, with minimal glare. Again, calibration was simple and fast. However, the special interactive mode pen was nearly as reviled as the standard pen, both for its poor ergonomics and its clumsy feel. With a little practice, controlling the computer from the image on the whiteboard was easy enough to do. Doing it well is another matter. Because the image is being projected at the board, and therefore at you, as you write, you will cast shadows on the areas you are interacting with. And if you look back at your class, you can find yourself blinded by the projector's beam.

Despite the drawbacks and annoyances, it was obvious that the SchoolBoard has some outstanding features and capabilities. Being able to easily and accurately capture all your notes, drawings, and annotations from the board into an electronic file is a powerful feature in itself. Freeing students from laborious note taking may enable them to more fully listen

and understand. With practice, the interactive mode can be a powerful way of sharing a computer experience with an entire classroom.

We received the optional stand with casters. It arrived unassembled. GTCO thoughtfully provided a nice screwdriver and decent assembly instructions; unfortunately, the stand itself was defective—part of the frame had not been threaded to accept the bolts. The stand is not required, so we were able to continue with the evaluation. However, at a list price of \$395 for a relatively simple, albeit sturdy stand, you should expect better attention to detail.

GTCO Calcomp offers a wealth of educational materials, including lesson plans and strategies as well as tutorials. At \$1,995 (\$2,395 with Bluetooth) for the 77.5" model and \$1,595 (\$1,995) for the 60" SmartBoard, these aren't casual purchases, but they might be excellent investments if they fit your teaching style.

GTCO Calcomp  
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*J.V. Bolkan is a senior editor for L&L. He has been writing about technology since green vs. amber monitors was the hot topic among the soldering iron set.*