South

The Boston Globe

MILTON

The next new hotspot

By Dave Eisenstadter | GLOBE CORRESPONDENT MARCH 10, 2013



ARAM BOGHOSIAN FOR THE BOSTON GLOBE

Tucker School third-graders Cheyenne Straughter and Peter Rhee used math applications on iPads.

When a student was caught with an electronic device during class, it used to wind up in the teacher's desk drawer. Now, Milton schools are joining the growing number of districts that are passing out the devices.

The Milton School District is in the midst of installing the infrastructure needed for full wireless

coverage in all six schools by this fall. And just last weekend, the Milton Foundation for Education held its annual fund-raiser to foot the bill.

The payoff comes next school year, when Milton expands a pilot program for "one-to-one" wireless devices such as iPads and Kindle Fires, with the ultimate goal of having every school well-stocked with a variety of devices.

"At one point it felt threatening and a little overwhelming, but we're watching it now become an exciting tool and a new way to deliver the information and a new way to catch children's attention," said Holly Concannon, coordinator for K-8 technology for Milton schools. "Nothing will ever replace a good teacher, but it's really nice to have the equipment to pique the interest of the students."

Milton is among the more aggressive public school districts going wireless in this area. Towns such as Duxbury and Stoughton have universal wireless in their schools, and Westwood hopes to provide a tablet to each high school and middle school student in the near future, said Steve Ouellette, Westwood's technology director.



ARAM BOGHOSIAN FOR THE BOSTON GLOBE

Kindergartner Owen O'Donoghue, 5, uses a SMART board to answer questions at Cunningham Elementary School in Milton.

Schools are being pushed toward Wi-Fi to stay abreast with technological trends throughout society, and to comply with state requirements for computer-based standardized tests that are slated to partially replace the MCAS exams in the spring of 2015.

"It's like building a cellar before building a house," Milton Assistant Superintendent John Phelan said of establishing wireless. "You have to have it."

The push in Milton began in earnest in the fall of 2011, when parents at the Glover and Collicot elementary schools donated some iPads to the schools. The next year, Tucker Elementary School won a federal grant for scoring high on MCAS exams and used the money to buy 30 iPads.

Last summer, Cunningham Elementary School, which purchased a dozen Kindle Fires, also received five iPads as a gift from the fifth-grade class of 2012.

A recent visit to Cunningham showed how the students are being introduced to high

-tech instruction early on.

In one kindergarten class, teaher Sara Slater pointed to the classroom's SMART Board, the electronic descendant of the blackboard, as they read, "Today's temperature is "

"What's your guess?" she asked. One thought it was 30 degrees; another said 31; a third wasn't sure, but guessed it was warmer.

Touching a button on the SMART Board's display, the screen connected to weather.com, revealing the outdoor temperature as 34 degrees.

At Tucker Elementary School, third-grade teacher Kirsten Finnell said using tablet devices like iPads helped her track each students' progress.



ARAM BOGHOSIAN FOR THE BOSTON GLOBE

Students Caylie Zhong, 7, (left) and Lillian McLaughlin, 7, use a Kindle to read a story in a 2nd grade English class at Cunningham Elementary School in Milton.

Most students were using an iPad app called Splash Math, which tested multiplication and other third-grade skills, rewarding correct answers with games involving fish.

"Without the iPads," she said, "we would probably all be on the rug and I'd be standing there telling them questions, and only one student would get the opportunity to answer a question. But with the iPads every single kid gets to answer, so I can see how well each student knows, not just one student."

With universal wireless access, students could link their devices to the room's SMART Board, allowing the rest of the class to follow along, or connect to websites offering further lesson support, Finnell said.

One student who completed the assignment, Peter Rhee, used his iPad to log onto the Web-based program Study Island. Clicking through his profile, Peter said he learned how to use the program in first grade.

It wasn't hard, he said.

When Milton's program is fully implemented, carts filled with tablet devices will be available for multiple classrooms in all grades, Phelan said. The district will



ARAM BOGHOSIAN FOR THE

probably buy different types of devices for different types of lessons, he added.

Visitors will be able to log on through a guest account that requires a password. As in other districts, sites deemed inappropriate, including Facebook, will continue to be disabled through the schools' wireless network.

BOSTON GLOBE

AP Studio Art teacher Karen Hughes (center) helps students Charlotte O'Neill, 18, (left) and Julia Keohane, 18, as they work with Adobe Photoshop software.

The money for the wireless initiative has been provided by the Milton Foundation for Education and the Copeland Family Foundation, according to Donald Greene, a board member of the Milton foundation.

Greene headed the Wireless Technology Advisory Committee, formed in the fall of 2012 to investigate the possibility of providing wireless access to Milton schools.

"People understand it," Greene said. "There is no doubt about how this could benefit kids."

Each year, the Milton foundation chooses a theme and provides grants to the public schools based on that theme. This year and next, the theme is technology.

Consulting with specialists in educational technology, Greene called Christopher Dede, the Timothy E. Wirth professor of learning technologies at the Harvard Graduate School of Education.

"The hallmark of a successful program is that the technology is not seen as the innovation," Dede said. "Technology is not magic; you don't learn because you are standing next to it."

Dede praised Milton's approach to technology as thoughtful. Rather than going out and buying lots of iPads, the district has a pilot program trying out several different devices and seeing how they work within the school system, he said.

He added that failing to invest in educational technology, including wireless and tablet devices, would hamper students' ability to compete in the global economy.

Isa Zimmerman, an education consultant and retired Massachusetts school superintendent and principal, said technology was sine qua non, particularly for science, math, and engineering.

At the same time, she stressed teachers' importance in helping students integrate technology effectively into learning. "We need to be careful not to become so dependent and intertwined with our technology that we lose a sense of balance," Zimmerman said.

Other school districts in the Boston area show wide disparities in their implementation of wireless technology, but are almost unanimous in their intent to provide it.

The Burlington district, where all high school students are provided iPads, is often cited as the model for technology, said Milton's Phelan.

Phelan added that iPads might not be the solution Milton seeks, however. Other devices, including the newly released Google Chromebook, are cheaper, and the technology for Kindle Fires has been easier to distribute from device to device, he said.

Another possibility is for a district to go BYOD, or bring your own device. As had been practice with graphing calculators, these districts would encourage students to bring devices from home, but also would have some devices on hand.

Joseph Andrews, manager of technology services for Hingham public schools, said he did not endorse BYOD, because students' devices would run on different platforms and teachers would be forced to devote too much time to tech support.

In Quincy, the public schools may be leaning toward the BYOD model, according to Keith Segalla, who is in charge of technical education policy.

At the state and federal levels, standardized testing may prompt some districts to make their decisions faster.

In the spring of 2015, the Partnership for Assessment of Readiness for College and Careers tests are expected to replace the Massachusetts Comprehensive Assessment System tests for math and English language arts, according to J.C. Considine, spokesman for the state Department of Elementary and Secondary Education.

Those tests will be taken on a computer, Considine said.

Many educators say students are ready for such changes, and in fact, they sometimes help teachers adopt the new technology.

Milton's Concannon gave an example of a first-grade teacher new to using a SMART Board.

"If there was a problem, she would ask the students to fix it," she said. "Nine out of 10 times, they could."

Dave Eisenstadter can be reached at <u>eisen.globe@gmail.com</u>.

© 2013 THE NEW YORK TIMES COMPANY