Agency: Commerce, Community and Economic Development

Grants to Municipalities (AS 37.05.315)

Grant Recipient: Anchorage

Project Title: **Project Type:** Information Systems and Technology

Anchorage - Turnagain Elementary School Interactive Whiteboards

State Funding Requested: $60,000 **House District:** 26 / M

One-Time Need

Brief Project Description:

Purchase and install Interactive Whiteboards for Turnagain Elementary School.

Funding Plan:

Total Cost of Project: $60,000

There is no other funding needed

Detailed Project Description and Justification:

For project detail please refer to attached document.

Project Timeline:

Please refer to attached document.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Anchorage School District

Grant Recipient Contact Information:

Name:	Meg Marman
Address:	3500 W. Northern Lights Blvd.
	Anchorage, AK 99517
Phone Number:	(907)742-7200
Email:	Marman_Meg@asdk12.org

Has this project been through a public review process at the local level and is it a community priority? [X] Yes [ ] No

For use by Co-chair Staff Only:

$60,000 Approved

5:08 PM 5/4/2010

Contact Name: Kate Herring
Contact Number: (907)465-4923

Location **Turnagain Elementary School**

Project Title: **Purchase and Install Interactive Whiteboards**

Amount of Funding Requested $60,000.00

Total Funding to complete project $60,000.00

Primary House District: 26 **Secondary House District(s):**

Primary Senate District: M **Secondary Senate District(s):**

Project Description

Principal's Priority 1

Turnagain presently is still behind technologically speaking in comparison with other elementary schools, which have been built or remodeled within the last several years. We are proposing the addition of 7 interactive whiteboards (1 per grade level, K-6) The board will enable teachers to present lessons that are motivating and highly engaging for students. The large screen display will be able to include graphics, sounds, photographs, video clips, and text. The board will allow the students and teachers to interact directly on the screen. The action required would be to purchase the board with an attached projector and mount board to the wall.

Benefits if Project is Funded

Lessons will be dynamic and interactive so students are motivated to learn. Teachers will be able to infuse technology into their lessons and teach students computer skills to develop multimedia projects.

Impacts if Project is not Funded

# of Students impacted by project 400

Project Start Year 2011

Project Finish Year 2011

Project has matching funds are available **No**

Project has prior state funding available **No**

Project has federal funding available **No**

Project has has a public review process **Yes** **Capital Request Advisory Committee**

Reqeust Contact Information

Principal: Meg Marman

Address: 3500 W. Northern Lights Blvd., Anchorage, Alaska 99517-3318

Phone: (907) 742-7200

Validated by: Facilities ***Validation Date*** 1/14/2009

Project Type Infrastructure

Getting to The Top of the Class

Smart Technologies aims to change how kids learn. Building the company was a learning experience, too. By Elizabeth Corcoran

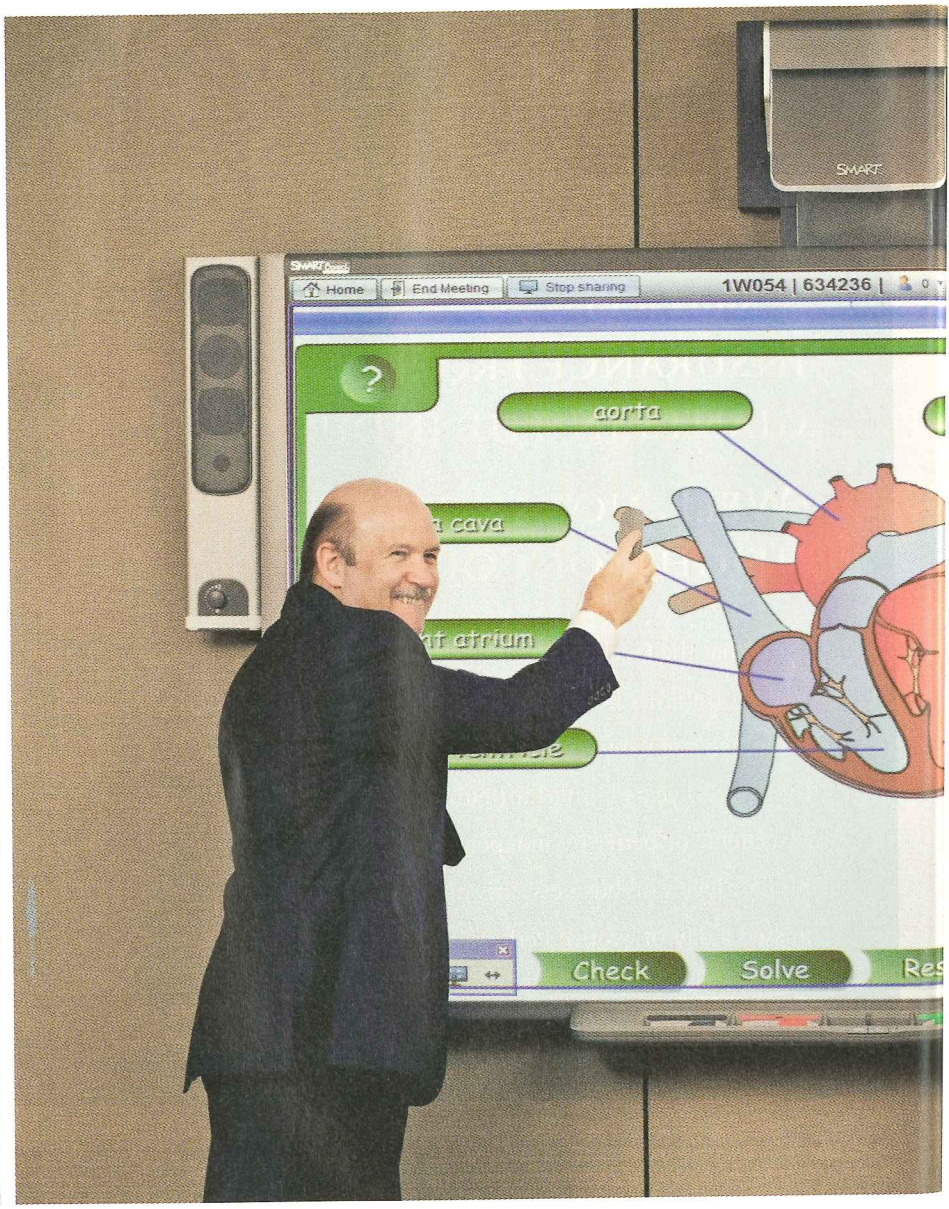
CHILDREN WHO MARCHED INTO their grade school classrooms this autumn found the usual assortment of crayons, glue sticks and light-up globes. Thousands found something else: large interactive screens affixed to a classroom wall, known in playground lingo as "Smart boards."

When attached to the Internet, these boards are a portal to the digital world. Students can manipulate what's on the screen with a finger or a stylus. Changes get saved to a laptop computer and then printed or sent home via e-mail. Teachers like the boards. They're cool and digital—but if you want to use them like a blackboard, you can do that, too.

Sales of wall screens, which cost between $700 to $4,500, have zoomed from 170,000 units in 2004 to 700,000 worldwide this year, mostly to schools. Almost a third of K–12 classes in the U.S.—and three-quarters of the schools in the U.K.—now have one. "This is the first tool that's transforming our classrooms and showing how they're different from the past hundred years," says Diane A. Garber, principal of Lincoln Elementary School in Burlingame, Calif.

The leader of this spurt of silicon is not in Silicon Valley. More than half of the world's interactive whiteboards (and 63% of those in the U.S.) are made by Smart Technologies, a 22-year-old privately held company in Calgary, Alta. run by husband-and-wife cofounders David A. Martin, 60, and Nancy Knowlton. "We think these need to go into every classroom," says the soft-spoken Knowlton, 55, the company's chief executive. "There's no silver bullet in education, but we see these increasing student enjoyment and decreasing behavioral problems, and that translates into better student achievement."

Many of the past efforts to load classrooms with electronic gadgets have been bitter disappointments. U.S. school districts have spent billions on technology over the past two decades. Test scores haven't budged. Broken, dusty computers



languishing in corners of classrooms and school libraries are as commonplace as skinned knees on the playground.

For many reasons, including the erratic budgets of school districts, selling educational technology is a treacherous business. No one knows that better than Knowlton, who jokes that she and Martin have been so intensely devoted to building Smart that if they had married anyone else, their spouses would have long ago quit on them.

Their story began 20 years ago. Martin, who has a bachelor's degree in applied mathematics from Concordia University and had started an earlier company, got rights to LCD-panel technology developed by ITT. Knowlton, who earned an M.B.A. at St. Mary's University in Halifax, N.S., had been hankering to run a company. In 1987 they became the Canadian distributor for InFocus Systems, a digital projector maker, and started imagining what they could do with flat screens.

At the time that took some powerful imagination: LCD screens were expensive, clunky and limited to black-and-white. Research groups such as the Xerox Palo Alto Research Center were experimenting with interactive boards in meetings, but the devices were novelties.

In 1991 Martin and Knowlton built their first Smart board and hauled it to Comdex, the big tech trade show. Their demo caught the eye of a wandering executive from Intel, Les Vadesz. He wrote the couple a check from Intel—"barely seven figures," recalls Knowlton—for an undisclosed stake in the company, but the timing and the endorsement were crucial. In the years that followed, Vadesz and Intel provided Martin and Knowlton with advice and guidance but no additional cash, even though Vadesz would go on to start Intel's venture arm.

Martin poured his efforts into the unglamorous underpinnings of interactive board technology. The screens were based on resistive technology: They used two conductive layers separated by a few thousandths of an inch of air. Applying pressure to the board—with a stylus or a finger—connects the layers and sends data or commands to a computer. Martin's most important patent involves software that registers the location of that pressure in an X-Y grid and calibrates the image even if it's not neatly aligned. (Smart holds 29 U.S. patents and has 200 applications pending.)

Knowlton's and Martin's budget was gaunt. They had lost the right to sell InFocus supplies in 1991 after a reorganization—and without that, 97% of their revenue. Most of what they built they sold to schools. They scraped by on bank loans.

As they teetered on the edge of insolvency, Knowlton remembers their lawyer advising them to pack it in. The couple reflected on their motives. "One of us said: 'We want to change the way the world works and learns. And we're not done.'" Knowlton pauses. "It was such a preposterous statement that we both laughed out of control for 10 or 15 minutes." The next day they were back at it.

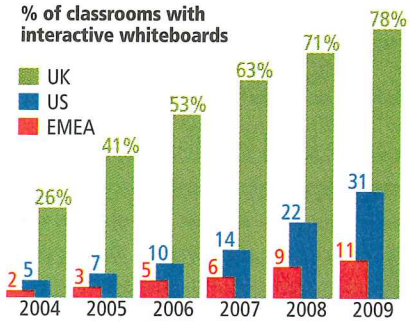
Other technologies were catching up. By the late 1990s the cost of flat-panel screens was plummeting. Screens grew thinner. The Web and wireless connectivity were both booming. Those changes made the boards not just fancy blackboards but interactive tools that students use even more than teachers. Smart racked up sales of $21 million in 1999.

In 2004 the British government decided to spend $90 million on interactive whiteboards for grade school classrooms. The main suppliers: Smart, Hitachi and Promethean, a U.K. company. Private equity firm Apax Partners became Smart's third minority stakeholder in August 2007. Smart revenue for the year ending Mar. 31 was $430 million.

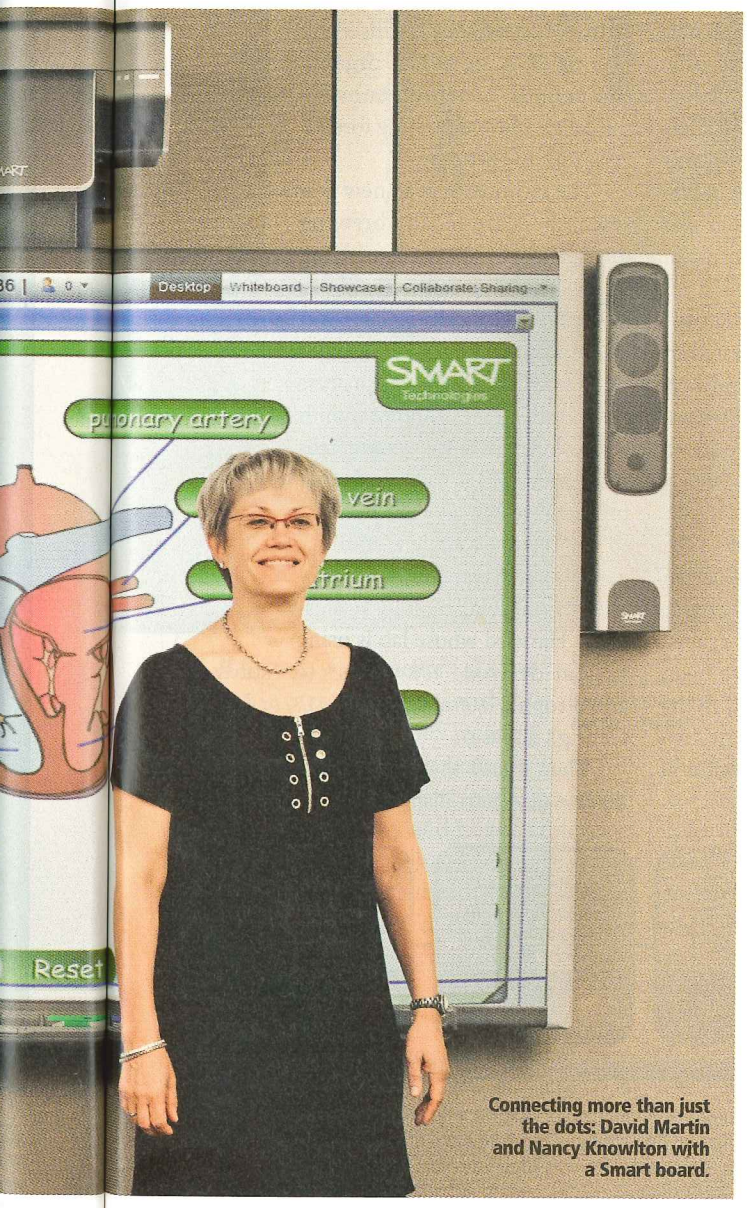
The future for digital suppliers to the classroom looks pretty bright right now. "Technology is becoming so ubiquitous outside the schools that it's requiring us to rethink technology inside the schools," says Steven Hargadon, founder of a popular social networking group devoted to education, Classroom 2.0. "As digital tools permeate the classroom, kids get more actively involved with learning," adds Scott McLeod, a professor at Iowa State University. "They become doers." F

TOUCHY LESSONS

The U.K. jump-started the use of interactive boards in primary and secondary schools.



Source: Futuresource Consulting.



Connecting more than just the dots: David Martin and Nancy Knowlton with a Smart board.

DANIEL WOOD / WONDERFUL MACHINE FOR FORBES