A virtual bridge

HP technology helps island community's students boost academic achievement, expand horizons



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Andrew Jones, Technology Mentor, Grand Manan



HP customer case study: An island fishing community's school uses the HP Technology for Teaching Grant Initiative to boost its teachers' technology skills and transform their students' classroom experience.

Industry: Education

Objective:

Although a recognized leader in integrating technology in the classroom, Grand Manan recognized that its upper elementary grade level classrooms were lagging behind.

Approach:

HP Technology for Teaching Grant Initiative to equip the teachers in its upper elementary grade classrooms with new Tablet PCs, as well as offer customized professional development opportunities to its teachers.

IT improvements:

- Upper elementary students have access to HP Tablet PCs
- PCs with wireless access can be easily moved to classrooms via cart
- Multimedia projectors allow teachers to display computer-based lessons, demonstrate computer, Internet skills
- HP iPAQ Pocket PCs provide teachers, administrators with remote access to files, Internet

Business benefits:

- Students' improved academic achievement boosting community quality-of-life
- District's limited funding resources preserved for other priorities



Growing up in an isolated, rural community can limit a child's opportunities. But in New Brunswick, Canada, Grand Manan Community School, with some help from HP, has shown that technology can build virtual bridges that not only boost student achievement, but connect youngsters with the world beyond their homes.

The hurdle: funding

Grand Manan's story began when a couple of teachers became intrigued by the potential for technology to improve classroom experiences and student achievement. The hurdle was funding. Grand Manan is a small, island community, separated from the mainland by a 90-minute ferry ride. Its economic base is limited to fishing and tourism, so it must be scrupulous about how it taps its financial resources.

The answer was to look for grant programs.

Andrew Jones, Technology Mentor, Grand Manan, began by using a Canadian government program to equip Grand Manan with computers. By the time that funding source was discontinued some five years later, Jones said, the school's culture had begun

Customer solution at a glance

Primary application

 Seventh and eighth grade classroom instruction

Primary hardware

- HP Compaq tc4200 Tablet PCs for students and teachers
- Cart to house tablets
- HP multimedia projectors
- HP digital cameras
- HP iPAQ Pocket PCs
- · Wireless access point

HP Services

 Customized professional development for teachers on technology integration to change. "Generally speaking, schools in New Brunswick don't have a lot of technology. Our activities generated excitement and grassroots support within the school, from students all the way to administrators."

Then Jones learned about the HP Technology for Teaching Grant Initiative. He realized it could help Grand Manan in one area where they particularly needed it. "While most of our grade levels had integrated technology into the classroom, our upper elementary classes had not," Jones said, citing a number of factors, including teachers' technology skills as well as their access to reliable systems.

Tablets at last

Grand Manan ended up winning both the original grant and a second phase grant from HP; these enabled Jones to equip the school's students with tablet computers. The second phase grant, for instance, provided 15 HP Compaq tc4200 Tablet PCs along with a cart to make it easy for the tablets to be moved from classroom to classroom. Other hardware provided with the grants included HP multimedia projectors, HP digital cameras, HP iPAQ Pocket PCs, and a wireless access point.

Perhaps most important, however, was that the grants funded customized professional development for Grand Manan teachers through The International Society for Technology in Education (ISTE).

The program began with a teacher skills inventory. Next, the school worked with ISTE to design a series of technology training modules to help its teachers with their computer, networking, and Internet skills. The district also sent four representatives to a National Education Computing Conference to connect with other innovative districts and share ideas.

Measurable impact

The impact on the classrooms has been dramatic. The teachers' instructional style changed. Instead of spending most of their time standing in the front of the room and talking, they began offering project-based activities. This, in turn, freed them to provide more one-on-one support to individual students. Instead of relying on textbooks, the teachers directed students to online materials – a low-cost way of enriching classroom resources.

The students' attitudes have also changed. They care more about academic achievement. Discipline problems have declined.

Thanks to the HP tablets specifically, the school's upper elementary students are more engaged in the classroom lessons, and an added benefit is that they are acquiring new skills. They've reached out to other school districts through the Internet, including one on the Rio Grand in Texas and another in The Netherlands; these activities have helped them learn about different cultures as they polish their communications skills. In addition to enhancing the daily lessons for students, access to the technology has allowed the students to learn how to create PowerPoint presentations, build websites, and research reports online.

And what about academic outcomes? Since it began making technology a district priority, Grand Manan has surpassed other districts in New Brunswick in academic performance. Its students score 15 percent higher in writing skills, for instance, and 14 percent higher in reading. Over the most recent three years, scholarships awarded to its graduating class have risen from \$32,000 Canadian to \$172,000. Twenty-two of its 25 students from the school's last senior class went on to college, something that had never happened before in Grand Manan.

And the improvements in student achievement are rippling outward, affecting the quality of life of the greater community. "Many of these students return to Grand Manan after college," Jones said. In the past, we've had to convince non-islanders to move here in order to supply us with professionals like nurses and teachers. Now our students – who are already culturally acclimated to living in this type of community – are filling that need.

"We hope HP realizes the impact of these grants on our school," Jones concludes. "Our students are hooked, our teachers are hooked, and there's this tremendous level of excitement and passion. Thanks to HP, we now have a progressive, technology-oriented culture at every grade level. The value to Grand Manan's school and the community as a whole is immeasurable."

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