



Cochrane High School & Bow Valley High School

ONE-TO-ONE INITIATIVE

Beginning September 2011, Cochrane High School (CHS) & Bow Valley High School (BVHS) believe we are ready to move our learning community in a new ubiquitous computing project, entitled One-to-One. Specifically, on the first day of school, and every day thereafter, every CHS & BVHS student would be asked to bring a laptop to school to support his/her learning.

What is the primary goal of this initiative?

The key goal of this initiative is improving and enhancing student learning through the implementation of ubiquitous computing. Ubiquitous computing makes use of a variety of digital devices and resources to engage students in critically analyzing information, creating new knowledge, communicating what they have learned, and choosing tools that are appropriate for a particular task.

Why move in this direction?

There has been a surge of research related to the role of technology in the daily lives of students. Dr. Sharon Friesen, a leading researcher in the area, believes five core principles must be followed to engage today's "millennials", a term used to describe the generation born in the 1980s and 1990s:

- Effective teaching practice begins with the thoughtful and intentional design of learning that engages students intellectually and academically.
- The work that students are asked to undertake is worthy of their time and attention, is personally relevant, and deeply connected to the world in which they live.
- Assessment practices are clearly focused on improving student learning and guiding teaching decisions and actions.
- Teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning.
- Teachers improve their practice in the company of peers.

Surrounding and infused into each of these five core principles is the effective use of the technologies. It is undeniable that the face of education and the role of technology are changing rapidly.

How does this initiative align with the school's mission and learning principles?

Cochrane High School & Bow Valley High School mission statements and key learning principles were designed to meet the needs of a high school environment, and were aligned with Rocky View Schools' Portrait of the 21st Century Learner.

CHS & BVHS' aim is to use the power of technology in a purposeful and meaningful way to deepen understanding. The schools strongly believe that the one-to-one initiative will help create a culture where the seamless integration of technology with curriculum will provide a rich information and communications-learning environment. Not only will our students benefit, but our teachers will be engaged in a professional learning environment that will further develop and model their own critical thinking, communication skills and professional practice.

How will this project get laptops into the hands of all students?

Every student from grades 9-12 at Cochrane High School & Bow Valley High School will be encouraged to purchase a laptop for school, starting in the 2011- 2012 school year. The minimum standard for the immediate future will be either a Mac (recommended) or PC laptop, but as computing devices evolve, that minimum standard will change. For students who can't afford a laptop, the school will have loaners for them to sign out during the school day.

How will CHS & BVHS be able to facilitate the purchase of laptops?

RVS is willing to bring representatives from Apple or other vendors to the school to show the features of their machines. Students could order (and pay) for their laptop on the spot or enter into a payment option with the computer vendor.

Will students that already have laptops be able to use them for the initiative?

At this point in time, standards set for student laptops include existing student equipment. However if specialized functions are required for a specific course, such as video editing and storage, a current student owned computer might not be adequate. In such cases, the school will have available computers for these specific purposes.

How will student computers be supported?

In addition to accessing additional time of one of RVS' IT staff, we hope to find students with an interest in learning how to support Apple and PC operating systems and having them available at lunch and after school to assist with minor technical support. The school envisions these students would earn CTS credits while getting their A+ IT certification. Ultimately, our learners will be responsible for their own computers, i.e., for safe handling, warranty issues, fixing breakage.

How will the students be able to power/charge their units for a full day's usage?

CHS & BVHS students will need to be proactive in charging their machines daily at home. CHS & BVHS will be supplying power charging sources should students need them.

How will computer theft be addressed?

CHS & BVHS strongly recommends parents insure their student's computer through home insurance. As with all possessions brought to school, it is important for students to keep their valuables secure by keeping them in their locker. Additionally, there are options that help track to whom the machine belongs. Permanent identification of the machine via engraving is recommended. CHS & BVHS will provide this service.

Does each school have the infrastructure to support 500 - 750+ laptops?

RVS experts will assist both schools to ensure that appropriate infrastructure is in place to support the increase in technology. This endeavour has been achieved at Springbank Community High School (SCHS).

What other technologies will be used through this initiative?

All of the classrooms are equipped with interactive whiteboards and/or projectors. These tools will be used regularly as a teaching tool. The schools also use Plone technologies, which serves as a powerful tool to post important information for both students and parents. During the 2010/2011 school year, over 100 percent of staff attended inservice training for a new learning management system, called Moodle. CHS & BVHS will use this online classroom environment, along with Video Conferencing and Podcasting to augment students' learning, as well as increase students' access to additional programs, special projects, and initiatives.

How will this endeavour be funded?

The plan for Cochrane High School & Bow Valley High School is to use its Division supported technology budget to build infrastructure for a one-to-one environment.

Will parents be charged extra fees?

Outside of the purchase of a laptop for their student, no additional fees will be charged for this initiative.

What will the technology budget be spent on?

The plan for building infrastructure is twofold; the school will invest in expanding the opportunities for students and teachers to be able to operate in an environment that will be inviting to ubiquitous computing. This will require additional hardware and software support. The second infrastructure, and perhaps the most important, is to continually invest in professional learning for teachers. Essentially the transformation of learning and engagement will be continuous.

Will this initiative be evaluated?

Theoretically, the implementation of one-to-one ubiquitous computing technology should lead to improvements in academic performance, increased student motivation, increased competency, and effective utilization of technology. Both qualitative and quantitative data will be collected. Baseline data will be collected at the beginning of the implementation phase, and posttest data at the end of each school year.

What is the plan to communicate with the stakeholders?

CHS & BVHS will consult with our school council chairs and will hold various parent meetings to discuss this initiative in depth to gather input. These parent meetings will be broadcasted live via Bobcat TV over the Internet. Additionally the information is available on our Plone sites. School councils from our feeder schools will be invited to attend these meetings.

Who can I contact for more information?

CHS & BVHS encourages parents to call the school office at 403.932-2542 (CHS) and 403.932-9005 (BVHS) if they have any questions. Staff also will be posting regular updates on this initiative on our school plone sites.