ABEL Technology @ Your The Sky is NOT the Limit

Rob Baxter

ollaboration between the teacher-librarian and the classroom teacher is not a new idea for anyone in the teaching profession these days. A new approach or dimension can be added to this concept, however, through the use of ABEL (Advanced Broadband Enhanced Learning) technology, a powerful tool that heightens learning through webconferencing, and makes a lesson or unit a truly authentic situation for students at the primary and secondary levels alike.

For Christine MacIsaac, teacher librarian at Dr. John M. Denison High School in Newmarket, ABEL represents "huge learning, and opportunities for learning for both teachers and students, and tons of resources that I didn't know existed before and wouldn't have known how to use before. And so now being able to bring them to my job and then bring them to students is really exciting." (For the full RealPlayer interview, go to www.abelearn.ca/about_us).

Alison Mann, exemplary teacher at Ursula Franklin Academy, Toronto District School Board, and winner of the 2006 Learning Partnership National Technology Innovation Award, has also used ABEL extensively with her students: "Usually the projects entail some sort of innovative technology, some sort of different approach to teaching and one of the approaches I do take is a constructivist approach where the learning is student centred, and I will give tutorials and show students how to use technology, but in effect students direct their own learning and they really have a say on what kind of projects they'll work on.... It's amazing what value it [ABEL] brings to the classroom.... We've had so many opportunities to speak with people who never would have an opportunity to come to our school. It's amazing the amount of video conferencing we can do in a year and all the visitors, the virtual visitors we can have ... " (www.abelearn.ca/about us)

Thanks to ABEL, students, teachers and teacherlibrarians can now be in touch with each other all across Canada, North America and beyond. To use the technology, you need access to the Internet. High broadband speed is desirable, although lower speeds are possible, provided you have the patience to wait. You'll also need a camera to connect you and your audience to your computer, a microphone, a blank screen, and some software installed in certain instances. However, all you need is a basic Internet connection to use most of the ABEL tools such as United Streaming, Turnitin, Moodle, blogs and wikis. A full list is available at www.abelearn.ca/tools_ resources.

Ian Gowans, currently a Computer Resource Teacher, York Region District School Board, has been using ABEL for five years. One of the most impressive moments for him was when he connected his students live to the space shuttle orbiting the Earth: "I was fortunate enough to participate with NASA in a video conference with my Grade 12 Exercise Science class. They do a number of pre-planned conferences and I saw one that was targeted for intermediate students [about] the effects of gravity on a person in space. I emailed the contact and asked if that presentation could be adapted for my senior students.

The NASA contact got back to me and stated that they would indeed prepare a presentation specifically for us. On the day of the event I was astounded. The presentation was fantastic and, as it drew to a close, the presenters noted they had some extra time for questions. My students asked what was happening on the space shuttle at that specific moment. Unbelievably, the presenter flipped a couple of switches and up on our screen came a live camera feed from the shuttle. All of our jaws just dropped. The students and myself talked about it for the rest of the year.

I also found that Vanderbilt University in Tennessee offered a program called Physiologist on Demand. The presenter would answer questions posed by the students within a video conference. Whenever I had a question I couldn't answer, the students would just file the question away until we talked to Dr. McCombs again. He would research the questions and then come into the video conference with detailed explanations for each question. Our rapport built up and he actually emailed my class, offering to do a demonstration of some human hearts that his lab had just received. It was incredible. And unbelievably, neither of these situations cost one penny!"