Making science more interesting

by Donna Reimer

This year three School District 68 secondary schools are initiating projects to make science more interesting and relevant to students. John Barsby, Ladysmith and Woodlands Secondary Schools have each received multi-year grants from the Mitchell Odyssey Foundation to implement science enrichment activities. Each school will receive $25,000 to support its projects.

At Ladysmith Secondary, the Odyssey Foundation program has provided LSS the opportunity to put leading edge technology in the hands of students. "As science teachers at LSS we are excited about the opportunity to enhance student learning through technology in science," says Brian Heese, science department head.

"We will be using our grant to acquire technology – including computers, software, hand-held data collectors, sensors, a spectrometer and hands-on lab supplies – plus provide the training for teachers to use the new technology." The school will also use a portion of its funding to expose students to science career opportunities.

Heese says that although this is just the first year of the grant, already all of the school's science rooms are outfitted with permanently mounted projectors and each room has a slate tablet computer. "Essentially, every room is wired fully for the teacher, speakers and all. We use this technology on a daily basis to teach our classes. It is great, the teachers and kids love it. It takes teaching and learning to a different level," he says.

"We have also purchased hand-held data collecting 'mini computers' that allow us to collect dozens of types of scientific data with incredible accuracy; everything from pH to blood pressure can be done by these machines. These are university research level machines that allow our kids hands-on experiences they otherwise may never get."

Heese says, "The program has been great for LSS and we owe a great debt of gratitude to the Odyssey Foundation."

At Woodlands Secondary, the grant will support a focus on generating students' interest in science by exploring science in the local forest and ocean ecosystems.

Ladysmith Secondary Science Department head Brian Heese shows student Peter Wells how new technology the school has obtained through its Odyssey grant can be used to measure a person's resting heart rate.

Woodlands Principal Lee Venables says that the school believes that field trips are a great way to generate student interest in science. The school has decided to focus the field trips locally and to work local science-based organizations to develop teaching resources to support the field trips.

The school has already had all three of its Grade 8 science classes visit the Morrell Sanctuary and is working on developing resources for a Grade 9 inter-tidal studies field trip to Departure Bay and exploration of local ecosystems. The school is also planning to work with Pacific Biological Station staff.

As the project progresses, Woodlands will bring in guest speakers, purchase software and supplies and provide professional development for teachers, as well as science career exploration for students.

Computer technology such as hand-held data collecting devices have been purchased that allow students an opportunity to move outside the classroom and collect data in a similar manner to a scientist. This grant money will allow our students to perform authentic science and to explore careers in science through various field trips and guest speakers.

John Barsby's project involves field trip opportunities for students, fish habitat monitoring and equipment purchase. The grant will allow the school to offer field trips to junior science students for the first time in recent memory. Each student in the school will be able to take at least one field trip in his or her first three years at John Barsby.

The fish habitat monitoring will give students the opportunity to work with a fish technologist to sample water quality and study habitat conditions in several fish-bearing streams close to the school. This will be part of the regular Grade 8 science coursework, and will also be open to students at other grade levels.

The third focus of the John Barsby project is to purchase science kits that will allow students to build different science-related devices that will be used in class to support the curriculum and provide more hands-on activities for years to come. The assembly of the kits will be done as an after-school club, aimed at attracting the interest of students who are motivated by hands-on activities.

"We in School District 68 are extremely pleased to become involved in this project with Mitchell Odyssey Foundation," says Assistant Superintendent John Phipps.

"The science departments in these three schools are excited about this funding support and look forward to enhancing science learning experiences for their students." ∞