SUDBURY

Liane Esau (left) guides students Shannon Gauthier, Devin Nadon and Amber Tooley through the Specialist High Skills Major program at Lasalle Secondary School. It gives students opportunities to participate in hands-on energy-related programming, such as building and studying solar panels.

(PHOTO BY LINDSAY KELLY)



High-energy education

Specialist high school course guiding students into trades

By LINDSAY KELLY Northern Ontario Business

Between the tour of the Sir Adam Beck Generating Station in Niagara Falls, the GPS tutorial at the Canadian Ecology Centre in Mattawa and the Skype conversation with David Suzuki, the students in the energyfocused Specialist High Skills Major (SHSM) program at Lasalle Secondary School in Sudbury have had an intriguing year.

But for many, the program's appeal lies not just in the trips, but the variety of career possibilities it opens up to them.

"(The program) really depends on what courses you take because there are so many different things you get to explore and learn about through the SHSM," Grade 12 student Amber Tooley said. "So it really helps prepare you for pretty much any pathway you intend on going into in science."

Implemented six years ago at eligible high schools across the province, SHSMs allow students to focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma. The aim is to encourage students to consider careers in industries that are facing serious worker shortages.

SHSM programs are offered in 20 different industries, including mining, energy, construction, aviation and aerospace, manufacturing and business. To qualify, students have to take a bundle of nine to 10 credits specific to an industry, as well as six to eight certifications such as first aid and CPR, participate in experiential learning activities and complete a co-op placement. All costs associated with the SHSMs are borne by the Ministry of Education.

Leo Leclair, the SHSM co-ordinator for the Rainbow District School Board, said he notices a marked difference in students who enrol in the SHSM program.

"When they get involved in this program they're not only coming

for the mining class but they also realize they have to stay for English class and math class and history class, because it's all part of that bundle," he said. "And they're passing, and they're succeeding, and they enjoy what they're doing, because now, if you really think about it, they also have a purpose for those classes."

In Tooley's energy-focused SHSM at Lasalle, teacher Liane Esau keeps a solar panel at the back of the classroom that can be taken apart and reconstructed, or hauled outside to calculate the best angle at which to capture solar energy. Repurposed pop bottles contain biology experiments, and across the hall, a motion-sensor water fountain tallies the number of water bottles the students have saved by using refillable bottles.

They're all tools she believes enrich student learning, because they capture the students' interest, encourage them to attend class and help them decide if a career in energy and technology is for them.

"In Grade 10 we start to tell them if you're interested in sciences, if you're doing really well and you want to take more, the energy SHSM doesn't mean you're going to go into energy," Esau said. "But if you're planning to take more energy and tech courses, it'll open up some opportunities for you."

Along with the field trips, Esau ensures her students participate in "reach-aheads," familiarization tours of the local colleges and university, where they can meet the profs, visit the classrooms and walk the hallways, so it's less intimidating for students who may be thinking about continuing their education beyond high school.

And she's always on the lookout for businesses willing to take in placement students who may one day be building and installing solar panels or running their own business.

"They figure there are going to be a lot of positions with the Feed-in Tariff program going—they don't have a grid set up both ways to accept energy and also to send it up to homesso they need a lot more technicians," Esau said.

It's hard to quantify the success of the program, but Leclair said results from a board survey of the 2011 SHSM graduates following high school were promising. According to the survey, 24 per cent went to university, 30 per cent went to college and five to eight per cent went into an apprenticeship program or the workplace, while some returned to high school for a fifth year.

The province sees a benefit too: on June 11, it announced it would expand the program to 670 schools and 4,000 students across the province.

"Programs like this are preparing our students to get jobs in fulfilling and exciting industries," Education Minister Laurel Broten said in a news release. "Expanding these programs will give even more students the skills they need to succeed in the jobs of tomorrow."

The province credits programs like SHSM with increasing the graduation rate to 82 per cent from 68 per cent in 2003-2004.

It's not clear how colleges, universities and apprenticeship programs will reward SHSM graduates, but Esau said Lakehead University in Thunder Bay has already committed to giving priority rooming to students with the certificate, while other institutions are awarding bursaries to qualifying students.

For Esau, it's rewarding to see her students excited about learning. She now has 29 enrolled in the energy SHSM, 13 of which are graduating this year. Already some have decided to go into the energy and tech sectors and are demonstrating an aptitude for the industry.

"Some students that weren't necessarily all that keen about coming to school, who were smart but weren't as involved, are becoming involved," she said. "All of a sudden it's a lot more interesting now."

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