

[trend]

Living labs

If Jeff Willson has his way, it'll soon be normal to see 3D printers in Canadian high schools. Willson is the executive director of Brilliant Labs, a New Brunswick-based non-profit that works to develop creativity and entrepreneurship by setting up labs, also known as MakerSpaces, in elementary, junior high, and high schools. The labs let students experiment with tools and supplies not normally incorporated into the traditional curriculum, such as 3D printers, vinyl cutters, and robotics equipment.

Students can follow just about any interest they have, including woodworking, metalworking, sewing, and filmmaking. "The idea is that within the MakerSpaces, with all these different tools and different people," says Willson, "they become like living labs with everyone collaborating, communicating, and problem-solving together to create some pretty amazing things."

On April 7, Premier Stephen McNeil announced Brilliant Labs' debut in Nova Scotia, with one lab in all eight school boards across the province. The program had already been around for a year, with seven labs in New Brunswick. The Nova Scotia labs will be the company's first expansion into another province. "This is round one," says Willson. "As we build capacity and we're able to gather more funds, and hopefully more private sector partners, it will open doors to more MakerSpaces being developed."

The program's goal is to foster creativity, innovation, and entrepreneurship in young people. In reference to industries such as 3D printing, sustainable energy, and robotics, Willson says, "these are billion-dollar industries now—what are they going to be worth in the future? If we can empower our youth to get a head start today, it's huge for the whole fabric and culture of the region."

New Brunswick-based tech entrepreneur David Alston helped create the program after returning from a trip to Finland and Estonia to view how those countries' education systems incorporate technology in the classroom. "It became obvious that through project-based learning and MakerSpaces, we can really start to effect change," says Willson. "Already we're starting to see some really cool things come out of the MakerSpaces."

For example, students from Miramichi Valley High School in New Brunswick have developed and tested an underwater robot to study fish populations in the Miramichi River. The students worked with the Miramichi River Association and conservation societies to deploy the robot in the spring. "It's bringing together industry and students so the students feel what they're developing in the project actually has an impact on society," says Willson.

Brilliant Labs also offers programs to help teachers find creative ways to engage students, in addition to organizing events and competitions for young people with start-up ideas. Willson doesn't believe the traditional school curriculum does enough to foster entrepreneurship and creativity. "If we can create a culture of entrepreneurs as early as kindergarten through to Grade 12, we'll create jobs that young people will want to stay here for."

The labs have been a huge hit with the students. "Their eyes light up," says Willson. "The amazing thing is seeing kids who are disengaged with the school system walk into these MakerSpaces—the smiles and the world of opportunity that's before them is a sight to behold." **—MATT JAMIESON**

[newsfeed]

Ocean Business

GeoSpectrum Technologies shines at international ocean technology exhibition



In April, thousands of visitors gathered at the National Oceanography Centre in Southampton, England, for Ocean Business 2015. Nearly 20 Atlantic Canadian companies were represented at the event, and Halifax's GeoSpectrum Technologies was one of them.

"This was our first year exhibiting," says Arnold Furlong, who has been the vice-president of business development at the underwater acoustics company for two and a half years. Plenty of innovative products were on display, and Furlong was pleased with the turnout. "The floor traffic was very good," he says. "Not only was it a high volume, but a lot of decision-makers were in attendance."

Ocean Business has grown significantly since it launched in 2007. The most recent show attracted the highest number of visitors to date, with more than 4,500 attending throughout the three-day event, a 29% increase from the 2013 show. Equally impressive is the number of international visitors, who accounted for 38% of total attendees (more than 350 countries were represented).

Furlong says that the Atlantic Canadian companies always draw a crowd. "Our region has a strong reputation for producing high-quality innovative products," he says. Of particular interest was GeoSpectrum's Particle Motion Sensor, which measures the presence of sound and aids in the study of the marine soundscape. "Visitors are keen to see the latest developments in technology," says Furlong. "The most beneficial part of the show is getting a chance to meet potential clients and other companies in the ocean sector. As the name suggests, the venue is a very good place to do business." - AMANDA LESLIE