

# School of Sustainable Design Engineering

## Ensuring strong community partnerships

by Gloria Welton

An Industry Engagement Day was held at the UPEI School of Sustainable Design Engineering (SSDE) program recently. Industry, government, and other community partners were invited to provide feedback as the school determines the next area to focus on.

Nicholas Krouglicof, Associate Dean, and Allan Dale, Director of Industry Partnership, welcomed a full lecture theatre of invited guests. “We will incorporate all of the feedback from this day and from further outreaches into our long-term vision,” says Nicholas.

The SSDE recognizes that engineering affects many aspects of society, and therefore students are exposed to a wide-scope and balance of knowledge and skills in engineering science, natural science, mathematics, and complementary studies. They are actively engaged in the profession of engineering by being connected to industry from day one.

UPEI’s School of Sustainable Design Engineering offers an innovative four-year Bachelor of Science in Sustainable Design Engineering degree. The program is unique, providing students with real-life work experience on community and industry-based projects in every semester of the program. Students in the third and fourth years of the program can enhance their technical knowledge by choosing one of three engineering focus areas: mechatronics, sustainable energy, or bioresources.

For more information about UPEI School of Sustainable Design Engineering, visit [www.upei.ca/engineering/welcome](http://www.upei.ca/engineering/welcome)  
For the full article, visit [www.employmentjourney.com](http://www.employmentjourney.com) and search School of Sustainable Design Engineering.

### Fourth-year student gives her account of her post-secondary experience

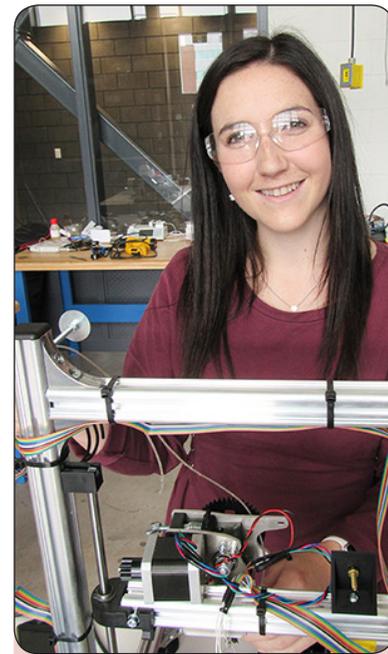
Haley Butler says when she was in high school she really didn’t know what was involved in Engineering as a career choice. “A big part of my volunteer efforts at the school is working with junior high and with high school girls to make them aware of this career at a younger age.

“When I was in high school, someone visited to tell us about Engineering. I was always interested in math and sciences, and Engineering gave me more options that suited my interest.”

After her first year, she knew she was hooked. “I was very surprised how much creativity and practical application there is in engineering. It is all about problem solving. After my second year at UPEI, I planned to go to Dalhousie to take the Environmental Engineering stream, but then it was announced a degree program was starting here.

“I am very happy I was able to continue my studies here on PEI. I was able to work part-time to finance my studies. I am not taking a full course load so that I can manage financially, and now I have no debt and less stress.

“This past summer, I did research with Dr. Ali Ahmadi in the Atlantic Bio Fabrication Lab. He offered me the job after taking his Bio Materials course. I produced all-natural biodegradable plastics made from potato starch. Recently, I made 3-D printing filaments out of the same material, and soon I will move into the actual 3-D printing of products. I am continuing to do the research with him until the end of the school year.”



Haley Butler

Students have access to the latest state-of-the-art equipment, professors with up-to-date knowledge, and the National Research Council centre, which is next door.

Haley’s design project this year took her to Pakistan to work with the University of Agriculture in Faisalabad for a week in October.

“We are working with a village with no access to waste water treatment, so the community is dealing with a lot

of illness. The problem is a lack of education around water sanitation. We will be working on a plan that will integrate well into their culture.

“After I graduate, I am thinking about doing my Masters with Dr. Ali Ahmadi and continuing with the research. He has many connections around the world, so I am thinking about going to places such as Germany to get further training in labs. I know there would be funding sources I could look into if I pursue my Masters.”

## PEI’s first Learn Day

### Sharing successes, ideas, and a new grant

by Gloria Welton

Many Islanders with an interest in the culture of learning on PEI took part in a Learn Day recently.

“Learning Partners Advisory Council planned the Learn Day to open up a conversation about life-long learning in communities across PEI,” says Bonnie Stewart, Co-facilitator for Learn Day. “Learning takes place across all ages and all walks of life, so we want to know what Islanders want to do for their own learning and the learning needs in all our communities.”

The day centered on the idea that building relationships is key to innovation and life-long learning, and that together, people can build towards the ideas that matter to them. The council wanted to bring people together to share their ideas, build connections, and build capacity for long-term learning collaborations across the province.

### A new grant announced

Learn grants are open to any PEI-based project or collaboration focused on learning for the year 2018. Grants range from \$500 to \$1,000 for each project. A total of \$10,000 will be awarded. The deadline to apply is **November 9**.

“The new learn grant is an opportunity to continue the conversations, continue the passion, and move forward to put ideas into action,” says Bill Whelan, Council Co-Chair.

“Learn grants will support ideas and collaborations that promote learning at any age, anywhere, across PEI,” says Bill. “I ask Islanders to think about what they could do in our communities to support learners and to consider applying for a learn grant to help put ideas into action.”

### Courtney Anderson talked about the impact of community learning

I spent two summers tutoring for a community learning program, and I am now enrolled in Bachelor of Education – français langue seconde at UPEI. My tutoring experience at The PEI Literacy Alliance Ready Set Learn program deepened my passion, and impacted my career decision.

I grew up wanting to be a teacher just like my mom. I went to the classroom with her and helped her set up, and I helped her at home to prepare for the next day. She suggested that I apply to the Alliance as a tutor.

After being offered the job, I was ecstatic to get started. I spent hours getting ready for the first day, and the training I took before the classroom work started went really well. I was expecting my first day with the student to go the same way.

By about 10:00 that first morning, I was having serious second thoughts about the job and my career choice. Some children did not show up on time, didn’t want to talk, and didn’t let me know I called them by the wrong name. I felt that first Monday was a disaster. I can’t say the situation got easier, but I got better at dealing with the realities of a classroom.



Courtney Anderson, UPEI student.



#LearnDay conversations by Rachel Derrah and Isabel Chendar of BraveSpace.

I learned very quickly to have a whole lot of options planned, because chances are the first few lesson plans may not work. As time went on, I learned some tricks of the trade. After two summers, I felt more confident with the work. I know it is what I was meant to do.

The lessons I learned and my love for this career came from working with the children. One of the first questions we ask children on the first day of summer is if they like to read books at home. One child in my class had just finished kindergarten and his answer to this question changed my outlook.

He looked up at me and he said his mom could not read. For eight weeks, we read all the books that interested him. Some days, we would read one or two, and other days we would read 12. Then one day he said with a big smile on his face, ‘I can’t wait to go home and read a book to mommy.’

I didn’t choose education to have the coolest classroom or to coordinate my binders like I thought I would, and I am not in it for the perfect lesson plan. I am in it for kids like my little kindergarten friend. I tutored 64 kids over the two summers, and his is the story I remember most. My hope for my future career is that I am able to help more kids like him to reach their full potential.

For more information on the work of the Learning Partners Advisory Council, visit [www.princeedwardisland.ca/learningpartners](http://www.princeedwardisland.ca/learningpartners)



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