

At Ontario Tech University, experiential learning is part of the institution's DNA

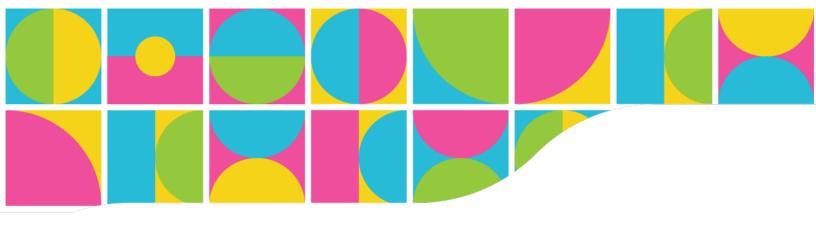
By Jennifer Foden

In the six faculties, as well as the School of Graduate Studies, at Ontario Tech University in Oshawa, some component of experiential learning has been "part of the institution's DNA from the outset," says Lindsay Coolidge, executive director of cooperative education, experiential learning and career development. There are programs where hands-on learning is required, like in the faculties of Health Sciences and Education, where nursing and teaching students are regulated to do a series of hands-on learning placements in hospitals and schools. However, the other faculties have many opportunities, too.

Take the Faculty of Social Sciences and Humanities, for example, which has a fourth-year practicum where students are paired up with a community organization or non-profit. Coolidge says students work on a project for a partner—like Refuge Youth Outreach Centre or Back Door Mission—over the course of a semester for approximately 100 hours, as well as reflect on the experience, for course credit. "A big part of experiential learning is not only the learning by doing, but also reflecting on that learning... [so the] student understands how they're benefiting from the actual experience," she says. There are university staff dedicated to community outreach and establishing relationships so students have quality practicums year after year.

In the faculties of Engineering, Science and Business and IT, students can do paid coop placement to gain industry experience prior to graduation. Coolidge says 57 per cent of incoming students in these faculties are interested in doing this, which demonstrates the demand and need for experiential learning. Past co-op placements include General Motors, Ontario Power Generation, Thermo Fisher and more.

Also, all fourth-year engineering and business students typically take on a team-based capstone project. "[This] stimulates the workforce," says Coolidge. "By working in teams to design and build a product, students are integrating their technical skills and cultivating the soft skills (collaboration, communication, time management, etc.) employers are looking for." Past capstone projects at the university have turned into legitimate businesses after graduation, like Moduleaf, an autonomous farming robot that



monitors and harvests indoor crops, that was originally started by three fourth-year engineering students.

The physical infrastructure of the university itself also facilitates hands-on learning. There are labs for research; the ACE Climatic Aerodynamic Wind Tunnel, a space used to prototype products under various climate conditions; Brilliant Catalyst, a start-up incubator; and more. When it comes to research, Coolidge says Ontario Tech has a unique approach. "Our vice-president of research has a really interesting way of saying that most universities traditionally are... 'push' institutions where something they've created is pushed out into the market. Whereas, what we find for Ontario Tech is we're very much a 'pull' institution where partners come to us with their challenges."

Experiential learning provides many benefits for students, of course. Coolidge points to resume-building and job search skills, networking with other professionals, earning money at co-op placements and exploring different career options. Local businesses benefit, too. "Sometimes it's an opportunity to have an initiative that you've been sitting on and thinking about for a while, but just don't have the bandwidth to accomplish," says Coolidge. She adds that it's a great way to gain insight into future employees, a "talent pipeline for the organization," so to speak.

"At the end of the day, [hands-on learning] leads to student success," says Coolidge. "And when students are successful, the community and the economy and everyone else is successful."

This is part of a 10-article series profiling the innovation happening in Durham Region. The region has been recognized as one of the top seven Intelligent Communities in the world for the third year in a row. Learn more at durham.ca/IntelligentCommunities and IntelligentCommunity.org.