Going the Distance in Applied Research and Innovation

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Today, SAIT Polytechnic is proud to be recognized as Canada's number-one applied research college. We take this leadership role seriously.

SAIT Polytechnic was the first publicly-funded technical institute of its kind in Canada, and 97 years later, it is one of the nation's leading polytechnics. At SAIT, we provide relevant, skill-oriented education to more than 75,000 registrants each year and through our applied research activities, we support industry with product development and productivity improvement.

While SAIT has "gone the distance" for close to a century, in many ways we are still in the early stages of applied research; there are always more opportunities to support students and industry in the pursuit of innovation.

What does "going the distance" mean to SAIT? Answering this question requires some context around the concepts of applied research and innovation and the enterprise SAIT created to support both.

In recent years, the term innovation has become an over-used description for solving just about everything – a panacea for the world's challenges. However, its basic definition simply means looking at things differently. Similarly, applied research is in fashion in some form or another at almost every academic institution. In its truest form, however, applied research means conducting research that has a practical application.

The starting line for SAIT was in 2003, when we created the Applied Research and Innovation Services (ARIS) department as a gateway for industry, students and faculty to collaborate on projects. At the time, it was a bold strategy. In the continuum of "idea-to-successful-commercial-venture," there was a gap where ideas died because there was high risk and low investment.

In creating ARIS, SAIT developed a plan to give our students – Canada's future workforce – a competitive advantage and to help industry accelerate development of innovative products and increase productivity.

The plan bridged the gap and helped turn ideas into commercial success by offering services such as: technology assessments; securing leveraged funding; designing, fabricating and testing prototypes; intellectual property and commercialization strategies; and transferring knowledge gained from the projects into the classroom.

In the process, we helped shape government funding policy and opened the door to collaborative industry-college-university applied-research projects.

The successful translation of innovative ideas and research into practical applications is not the sole domain of the academic sector, nor any one element of the academic sector. Rather, it is a collective and collaborative activity with seven main elements:

1. Ideas
2. An application or market
3. Expertise, equally scientific and applied/skilled
4. Capacity
5. Capital
6. The ability to close the deal
7. Supportive, enabling government policy.

With ARIS, SAIT has created a successful, collaborative model that incorporates all seven elements. Industry, government and academia all play an active role.

The cornerstone of our model is an efficient, rigorous and transparent decision-making process which responsibly stewards public and private investment while supporting student success.

Working with SAIT to develop and test their ideas, small- to medium-sized enterprises are able to explore business opportunities unencumbered by intellectual property issues, and with full access to funding, facilities and expertise.

What differentiates SAIT from other organizations is the integration of project activity with SAIT's core activity of education and training. Through direct links to SAIT's academic programs, apprenticeships, and diploma and baccalaureate degrees, applied research projects are also aligned with the economic objectives of both federal and provincial governments.

The areas of applied research at SAIT are market driven and cut across our industry-sector based schools. This business-matrix approach has resulted in project activity in RFID applications development, environmental technologies, green building technologies, alternative energy, sustainable culinary operations, and sports and wellness technologies.

The ARIS model will continue to evolve as we respond to the needs and ideas of students and industry. Compared to other organizations that have been involved in other aspects of research for decades, SAIT's success is remarkable.

In the past five years alone, close to 200 industry-driven, applied-research projects carried out at SAIT have resulted in the development of more than 250 prototypes.

Since 2007, SAIT's Innovative Student Project Fund has invested more than $450,000 in support of 730 students.

SAIT has "gone the distance" for its students by creating a successful enterprise. As a founding member of Polytechnics Canada, SAIT also has advocated for industry-driven projects in collaboration with other post-secondary institutions.

With ARIS, SAIT has demonstrated it is possible to hurdle barriers, simplify complexities and promote collaboration with industry, universities and colleges, and government partners. We are honoured to be recognized for this effort and to be named as Canada's Top Research College for 2013.