Entrepreneurship, innovation must be taught

Opinion: As host to top-ranked research universities, British Columbia stands much to gain from fostering talented young people

BY IAN MCCARTHY, SPECIAL TO THE VANCOUVER SUN NOVEMBER 27, 2012



Universities and business schools have a big role to play in advancing innovative output, like the creation of the Radarsat 2 satellite.

As a business school professor, one of the questions I hear most often from industry and government leaders in their effort to bolster economic growth, is: "Can we teach entrepreneurship and innovation?"

It is a question that pops up with regularity, in part because there is a perception that great entrepreneurs and innovators are born rather than made.

This debate of nature versus nurture has significant implications for British Columbia and Canada. As a province we have some of the top-ranked research universities in the country; thus we stand to gain greatly from fostering this talent and transferring ideas born in classrooms and labs into companies,

products and services. According to StartUp Canada, this sort of innovation leads to high-growth enterprises that are responsible for 45 per cent of new job creation.

But before answering the original question, it is worth looking to other areas for perspective.

Before we started teaching music to individuals, we assumed that musicians were just born with a gift for music. And before we taught people to write, we assumed that writing ability was innate. We now know of course that music and writing can both be taught at a high level. Need proof? Check out the alumni list from the lowa Writers' Workshop.

It's the same thing with entrepreneurship and innovation. It's not just an inherent, magical ability. Like writing, music or cooking, you can teach a whole generation of people to do it.

So the good news is, we can absolutely teach entrepreneurship and innovation.

Yes, the world has natural born innovators and entrepreneurs, but it is also increasingly the domain of those entrepreneurs who have devoted hard work and deep learning.

Universities — and business schools in particular — have a huge role to play in advancing this entrepreneurial and innovative output, whether their students remain part of a local start-up ecosystem or choose to take their new ventures abroad. And we are in the enviable position in this province to have some world-class institutions who are focused on exactly this.

Examples abound. At Simon Fraser University, our Management of Technology MBA program has historically attracted many scientists and technologists focused on launching new companies, or leading established ones.

One of our recent graduates, Andre Wirthmann, had already completed his PhD in Physics at the University of Hamburg before he came to SFU for his MBA. He had developed a new bone-tissue engineering procedure and completed his MBA in part to help him commercialize the technology that would benefit patients with bone defects.

As business schools, we undertake research studies to try to understand what makes a great entrepreneur, and what makes a great innovator. Understanding and instilling these lessons to our students and the larger business community is paramount.

Research on this topic by Leeds Business School in the U.K. shows that the importance of new business start-ups and the role of post-secondary cannot be overemphasized. The article, published in the journal Education + Training, shows that entrepreneurship education plays a major role in raising awareness of the nature and importance of entrepreneurship, changing attitudes and delivering skills.

Furthermore, the Leeds researchers show that education positively affects the potential entrepreneur's

perception of job security and attitudes toward opportunity, financial gain, job satisfaction and economic outlook.

Business schools can also distil to our future start-up leaders the different approaches, speeds and dimensions to entrepreneurship and innovation.

A paper I co-authored with my colleague Brian Gordon shows how high-tech start-ups can juggle two contradictory modes of learning to balance being innovative and efficient. One mode is called "exploration," a long-term activity involving risk and experimentation, and the other "exploitation," characterized by short-term time horizons and a focus on refinement and efficiency.

It turns out that for successful innovators, the balancing of exploitation-exploration tensions is much like riding a bike — it requires management control and leadership that allows employees and teams to continuously and irregularly shift their focus and balance to suit different innovation challenges over time.

In another research project that was published in the Journal of Product Innovation Management, I explored with my colleagues the process of bringing new products and services to the market. We developed three frameworks to organize new product development processes: linear, recursive and chaotic. These can be used by managers and development teams to adjust their actions to generate different innovation outcomes that vary in terms of how radical, costly and timely they are.

Developing a market-changing or radical or disruptive innovation requires very different mindsets, organization and action than incremental innovation such as next-generation features or product updates.

And research by my colleague Elicia Maine is helping companies to make sense of uncertainty around generic innovations such as a new engineering material which could have applications in a broad range of industries and applications. Her works helps managers to evaluate the risks and uncertainties to pursue the most viable path of innovation.

The bottom line is that entrepreneurs and entrepreneurship can take many forms, dimensions and outcomes. That means researchers and budding entrepreneurs and innovators will always have lots to learn.

But here's one compelling reason why it's important to nurture our made-in-B.C. start-ups.

This past June, Olav Sorenson from the Yale School of Management and Michael Dahl of Aalborg University published a paper in the journal Management Science called Home Sweet Home: Entrepreneurs' Location Choices and the Performance of Their Ventures.

They found that — you guessed it — new ventures perform better, survive longer and generate greater

annual profits when their founders locate them in their home regions.

Born or made, let's hope our entrepreneurs and innovators can continue to make British Columbia their home sweet home.

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