



Entrepreneurship Education in Canada

Annual Review - 2021

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Each year our team conducts an online review of entrepreneurship programming in the largest universities (by student population) in Canada. Specifically, the review looks at the type and number of entrepreneurship-focused courses, the experiential opportunities available to students outside of the classroom, and support provided to student startups. This year, the review looked at 27 universities in Canada.

This report summarizes these findings and reflects on the current state of entrepreneurship education and support in these institutions. It also presents three challenges for educators and administrators to consider as they move forward with programs, course design and development.



CONTEXT

Entrepreneurship plays a key role in all economies - creating jobs, providing incomes and an essential flow of goods and services, all critical ingredients for healthy economic development (Global Entrepreneurship Monitor, May 2021). In Canada this translates to 1.1 million small and medium sized enterprises accounting for 90% of all private sector jobs and contributing roughly \$1 trillion to Canada's gross domestic product (Business Development Bank of Canada, 2019).

Economists have long acknowledged entrepreneurs, their associated startups and the subsequent growth of their firms, as a vital part of economic prosperity. Therefore, it is no surprise that there has been an emergence of courses, support and activities to fuel these startups on university and college campuses over the past few decades. At the same time, young adults have demonstrated a growing interest in entrepreneurship as a career choice with up to 42% of millennials expressing interest in starting their own business (Business Development Bank of Canada, 2019).

While starting a business can have a vital impact on the health of our economy, and is a growing area of interest for many, it is also important to appreciate the benefits of entrepreneurship education beyond those narrowly associated with the promotion and support of traditional startups. All students, regardless of their career path (entrepreneur, intra-preneur, employee, innovator), increasingly need to learn to create value in environments of uncertainty with limited resources. They need to learn and practice those skills typically associated with being an entrepreneur.

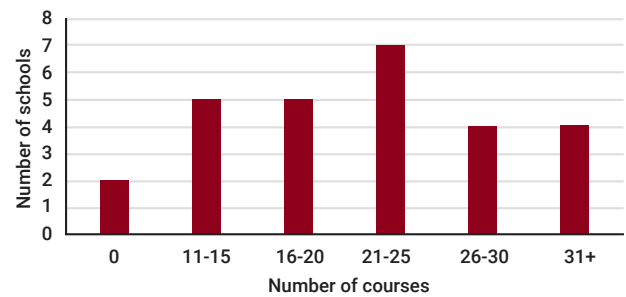
COURSES

This year's review found an average of 22 entrepreneurship-focused courses per institution spanning all faculties and levels of study. This is a dramatic increase over the last decade. A similar 2014 review of entrepreneurship courses in 20 Ontarian universities revealed an average of only 5.7 entrepreneurship courses per institution (Sá, Kretz and Sigurdson, 2014) and in 2010, most institutions offered between one and five entrepreneurship courses (Industry Canada 2010).

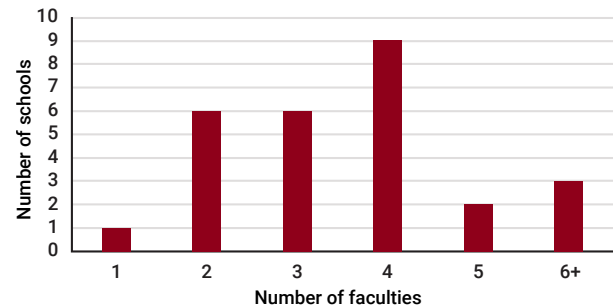
No longer strictly the domain of Business schools, the average number of distinct faculties teaching entrepreneurship per institution is 3.5. Business schools and Engineering faculties lead the way, followed by Science, Arts, and Social Science. The range of academic backgrounds of self-employed individuals and entrepreneurs supports the decade-old assertion that students of all faculties could benefit from entrepreneurship education (D'Intino et al., 2010).

This year's review also found both positive indicators and areas of opportunity related to the number and type of entrepreneurship courses available. Most have moved beyond "Business Planning" as a default entrepreneurship offering and we now see course titles specifically targeted at the early stages of new ventures such as *Creativity, Ideation, Opportunity Identification*, and *Customer Validation*. Traditional business topics are being customized for new ventures in recognition of the uniqueness and nuances of resource constrained environments in courses such as *Marketing for Entrepreneurs, Entrepreneurship Law, and Financing a New Venture*. Additionally, courses not traditionally taught outside of Engineering programs are emerging in Business schools. Examples include *Design Thinking and New Product Development, Software Venturing, Making a Prototype*, and others. The courses most often added in the last few years include those associated with social entrepreneurship, family enterprise, and opportunity identification.

Total Entrepreneurship Courses



Number of Faculties Teaching Entrepreneurship



Entrepreneurship courses - Business schools only

Total number of undergraduate courses at the top 5 schools: 16, 15, 14, 14, 13

Number of Business schools with 10 or more undergraduate courses: 5 (2020); 8 (2021)

Course titles of note within Business schools: Make Change Studio, Intrapreneurship, Financial Literacy for Entrepreneurs, Software Venturing, Technology Commercialization, Entrepreneurial Training for Social Sciences (and other domains/faculties), Making a Prototype, Leveraging the Crowd

Entrepreneurship specific courses:

- The average number of faculties offering entrepreneurship courses per school: 3.5.
- All schools teach entrepreneurship courses, with the average number of courses taught per institution (all faculties) - 22. Outliers include schools teaching 43, 41, and 39 courses.
- Social Entrepreneurship courses are taught at 24/27 schools with an average of 3 per school. One outlier university teaches 10 Social Entrepreneurship courses.
- Courses where students can earn credit for working in/on their own business are present in at least 70% of schools, up from 56% only one year ago.

*Based on a 2021 review of entrepreneurship programming at the top 27 (by student population) universities in Canada.

EXPERIENTIAL PROGRAMMING

There are many examples of programs and initiatives that are delivered outside the classroom, either by internal resources and programs (student service centres, entrepreneurship centres, event staff, entrepreneurs in residence) or by leveraging the work of student clubs. Common examples of experiential programming include competitions where students can pitch ideas and meet possible co-founders, student run conferences and events, and student clubs promoting entrepreneurship such as Enactus Canada, where students start real initiatives and viable social ventures.

In addition to these experiential offerings, the prevalence of support for existing student startups is encouraging. Each year students start their ventures while simultaneously pursuing their academic studies. These student entrepreneurs are creating immediate value, hiring employees, and in many cases graduating into their existing businesses. Rather than looking for a job upon graduation, they are creating their own. Common programming for student startups includes mentorship, consultation services, incubators, and accelerators.

There are some very encouraging trends and some exceptional best practices in institutions that have made a clear commitment to entrepreneurship. Student interest, donor funding, and economic imperatives continue to drive both interest and activity in this area. Still, much work remains for educators and administrators to ensure all students, regardless of their career aspirations, have access to these essential twenty-first century skills.



Programming and support outside of the classroom:

- Non-credit learning opportunities such as external speakers or training outside of the classroom is available in 89% of schools, up from 70% last year.
- Almost all universities offer some sort of incubator services with 21/27 offering more than one program. The overall average is 3.3 incubators or accelerators per institution.
- Idea or concept competitions were popular with 24/27 schools having one or more. Almost half the schools had three or more, with an overall average of two competitions; 16/27 schools have business competitions for student and/or alumni startups already in business.
- Entrepreneurship Co-op and work terms have gained popularity across Canada with 19/27 of schools (70%) offering students a chance to work in a startup, including their own, up from 43% in 2020.
- Student clubs related to entrepreneurship are well represented on campuses with 25/27 schools housing at least one entrepreneurship, or social entrepreneurship focused club, with seven schools supporting three or more entrepreneurship focused clubs.

**Based on a 2021 review of entrepreneurship programming at the top 27 (by student population) universities in Canada.*

WAY FORWARD

Those of us who teach courses, design programs, or administer education have a number of challenges we must embrace to equip our next generation of entrepreneurial leaders. We must look to redefine who we teach, establish what we teach, and finally, improve how we teach.

Who We Teach

Institutions need to recognize the societal value in creating a more entrepreneurial graduate who can either choose the path of entrepreneurship, or positively impact existing companies and organizations with their entrepreneurial skills. These life skills - and the methods of instilling them - are important for all students, not just those who have startup aspirations. In order to meet the challenges of the twenty-first century, we need to embed entrepreneurship at all levels of education: "It is not enough to add entrepreneurship on the perimeter - it needs to be at the core of the way education operates" (The World Economic Forum 2009, p.9.)

It is almost certain that all students, regardless of their career paths, will work in environments that will require an entrepreneurial skillset, where they are asked to *create value* in *resource constrained* and *uncertain* circumstances. We need to ensure we are equipping them with the right skillset to succeed. This includes a combination of well-thought-out courses that focus on the nuances of early ventures, the skills associated with them and opportunities for all students to learn and apply these concepts, not just those with startup aspirations.

Challenge 1: Teach the skillset and mindset of entrepreneurship to all students, regardless of their career aspirations.

What We Teach

Any new endeavor, whether it be a startup business, a social enterprise, an internal initiative, or a side project, requires a similar set of entrepreneurial skills. While many use management skills (marketing, finance, accounting, etc.) as a proxy for entrepreneurship, these skills lend best to managing and growing an initiative that is already operating. For example, an ability to create a balance sheet or income statement when one has no assets or revenue is not yet very useful. Inversely, getting to the point of being able to manage and grow a venture or initiative requires a messier and somewhat eclectic mix of skills and abilities. Carrying a new venture past the idea stage requires the entrepreneur (or intra-preneur) to successfully operate in an environment of heightened uncertainty, ambiguity and volatility - likely confined by scarce resources - in order to get from concept to inception to growth (Kruger and Dickson, 1994).

Arguably, some traditional management skills can be essential at the early stages of a new venture. For example, those associated with marketing and sales for customer validation, communication, leadership, and financial forecasting. In contrast, many of the management skills taught in business schools are grossly underutilized at a project's onset. While

some management skills don't translate well to what is often a chaotic and rapidly evolving period of time, intangible skills are more effective for progressing past the idea and validation stage to the start of a new venture, project or initiative. Essential intangible skills include (but are not limited to) assessing and pursuing opportunity, communicating a vision, working under pressure, problem solving, dealing effectively with uncertainty, leadership, leveraging resources, and more (Morris, Webb, Fu and Singhal, 2013). Traditional management skills are crucial later in the process as systems are needed, actual money and people are managed and the operating environment becomes more known and in turn, somewhat controllable. As a result of their importance in the early stages, however, intangible skills can - and should - be infused into existing curriculum. Further, additional courses focusing solely on these skills - and the opportunities to practice them - are required to provide a fulsome entrepreneurship education. This involves proactive effort both inside and outside of the classroom. As described by Silicon Valley veteran Steve Blank, startups are not just smaller versions of big businesses (Blank, 2013). We need to understand these differences when crafting our learning objectives and designing our courses.

Challenge 2: Establish the skills and competencies required of an entrepreneurial mind and utilize the best pedagogical methods to instill them.

How We Teach

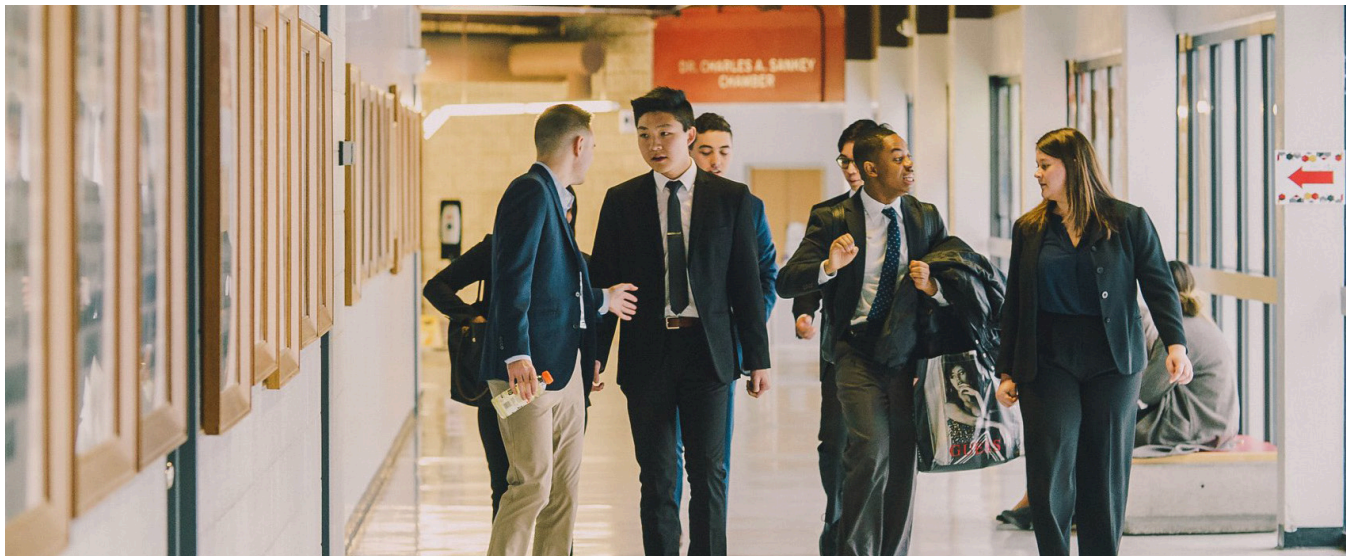
Entrepreneurial skills do not lend well to traditional lecture-based courses and their associated evaluation methods. Akin to teaching someone to play a sport by *telling them how*, versus *getting them on the field*, teaching these entrepreneurial skills requires unique methods that are not always easy to implement in traditional teaching environments. Entrepreneurship - or more specifically entrepreneurship - is characterized by action. Teaching entrepreneurship's associated skills requires an approach that promotes and simulates this same action-orientation, not just pensive reflection and synthesis.

Formal courses are not the only vehicle by which colleges and universities are able to influence learning and skills building. Post-secondary institutions must look for ways to create and support experiential learning both in and out of the classroom to help students learn and apply necessary skills. Experiential learning provides real opportunities for experimentation, application of skills,

networking, and valuable resume building. Not unique to entrepreneurship, experiential learning has previously been identified as a positive contributor to improved employment outcomes regardless of career path (Gosen and Washbush, 2004).

Much can be done both within and beyond the classroom to introduce programming and activities that get students out of merely absorbing content and into practicing skills and behaviors. This is imperative for these learning outcomes - and arguably many others - to be achieved. Employing appropriate learning-by-doing activities can trigger the development of important entrepreneurial competencies (Lackeus, 2014). Institutions and their educators bear the responsibility of looking for opportunities for students to practice, learn, and internalize these entrepreneurial learnings, in entrepreneurial ways. Entrepreneurship is by its nature experiential; we need to find additional and better ways to teach this mindset and skillset experientially.

Challenge 3: Utilize the best practices of experiential learning and teaching to create more and better opportunities for students to learn twenty-first century entrepreneurship skills.



For more information on the annual review, the survey methods, collaborating on future projects, or any questions related to this report, please contact Stephen Daze at daze@telfer.uottawa.ca.

REFERENCES

Blank, S. (2013). Why the Lean Start-Up Changes Everything. *Harvard Business Review*, May 2013.

<https://hbr.org/2013/05/why-the-lean-start-up-changes-everything>

Business Development Bank of Canada (October 22, 2019). A Nation of Entrepreneurs—The Changing face of Canadian Entrepreneurship. https://www.bdc.ca/en/about/mediaroom/news_releases/pages/bdc-small-business-week-2019-presents-new-face-of-canadian-entrepreneurship.aspx

D'Intino, R. S., Ross, L. W., Byrd, K. A., & Weaver, K. M. (2010). Entrepreneurship Is a General Education Course! The Why, How and Transferability of the Concept. *Journal of Small Business & Entrepreneurship*, 23(sup1), 669–682. <https://doi.org/10.1080/08276331.2010.10593508>

Global Entrepreneurship Monitor (May 2021). 2020/2021 Global Report, p.20. <https://www.gemconsortium.org/report/gem-20202021-global-report>

Gosen, J., & Washbush, J. (2004). A Review of Scholarship on Assessing Experiential Learning Effectiveness. *Simulation & Gaming*, June 2004.

Industry Canada (December 2010). The Teaching and Practice of Entrepreneurship within Canadian Higher Education Institutions. [https://www.ic.gc.ca/eic/site/061.nsf/vwapj/entrepreneurship-entreprenariat_dec2010_eng.pdf/\\$file/entrepreneurship-entreprenariat_dec2010_eng.pdf](https://www.ic.gc.ca/eic/site/061.nsf/vwapj/entrepreneurship-entreprenariat_dec2010_eng.pdf/$file/entrepreneurship-entreprenariat_dec2010_eng.pdf)

Krueger, N., & Dickson, P. (1994). How Believing in Ourselves Increases Risk Taking: Perceived Self-Efficacy and Opportunity Recognition. *Decision Sciences*, 25, 385–400.

Lackeus, M. (2014). An emotion based approach to assessing entrepreneurial education. *International Journal of Management Education*, 12 (3), 374-396.

Morris, M., Webb, J., Fu, J., and Singhal, S. (2013). A Competency-Based Perspective on Entrepreneurship Education: Conceptual and Empirical Insights. *Journal of Small Business Management*, 51 (3), 352-369.

Sá, C., Kretz, A., Sigurdson, K. (2014). The State of Entrepreneurship Education in Ontario's Colleges and Universities. Toronto: Higher Education Quality Council of Ontario. <https://heqco.ca/wp-content/uploads/2020/03/Entrepreneurship-report.pdf>

World Economic Forum (April 2009). Educating the Next Wave of Entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. <https://elimindset.com/wp-content/uploads/2020/05/WEF-Report-Educating-NextWave-Entrepreneurs.pdf>

