

Entrepreneurship Studies in Higher Education: A Bibliometric Analysis from Canada

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Abstract: The purpose of this paper is to identify broad themes that are pertinent to the study of *Entrepreneurship* in Canadian higher education institutions. 51 peer-reviewed papers formed the theoretical corpus of our qualitative analysis. We employed co-occurrence of keywords to identify research themes that appeared in our theoretical corpus. Keywords that occur together most frequently across the corpus were extracted and grouped into clusters. Each of these clusters represents a theme common to the keywords it encompasses. We used VOSViewer 1.6.10 for our analysis. The five themes extracted from the theoretical corpus are: *Integration with business education; Adopting global approach; Academic research in entrepreneurship; Robust education policy; Educational innovation*. We discussed the implications for entrepreneurship education.

Keywords: *Canada, higher education, entrepreneurship, bibliometric analysis, VOS Viewer.*

Introduction

A report developed by Industry Canada titled “The State of Entrepreneurship in Canada” mentioned in 2010:

Entrepreneurs have made fundamental impacts throughout the history of Canada, and today more and more Canadians from all walks of life are becoming, or thinking of becoming, entrepreneurs. Canadian entrepreneurs are celebrated in their communities and in the media, and, in an age where people are cynical about many public figures, they are becoming our new role models. (Fischer & Reuber, 2010, n.p.)

In 2014, the Canadian Chamber of Commerce reiterated: “Entrepreneurs are fundamental to economic growth and prosperity in Canada.” (Canadian Chamber of Commerce, 2014). Researchers also pointed out the phenomenon of entrepreneurship among the immigrant population in Canada through various studies (Hiebert, 2002; Kwak & Hiebert, 2010; Golob & Giles, 2017; Rahman, 2018). In view of the growing importance of entrepreneurship, it is crucial to study the evolving nature and development of entrepreneurship education in the country.

To start with, we will remind ourselves the definition of Entrepreneurship followed by the Organization for Economic Cooperation and Development (OECD), adopted in the Industry Canada report. Ahmad & Hoffman (2008, p. 4) articulated this definition in the following way:

The definition considers three components: Entrepreneurs, Entrepreneurial Activity and Entrepreneurship:

- Entrepreneurs are those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurial activity is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurship is the phenomenon associated with entrepreneurial activity.

In an important study to critically evaluate the scenario of entrepreneurship education and training in Canada, Ibrahim & Soufani (2002) listed the following entities as playing significant roles in training Canadian entrepreneurs: universities and colleges; small business centres affiliated to universities; the Business Development Bank of Canada; major Canadian banks; the Institute of Canadian Bankers; the Canadian Federation of Independent Businesses; youth employment services; provincial small business centres; YMCA programs. The findings of the study by Masakure (2014) in this regard are important as they established the positive impact of university education on entrepreneurship, vis-à-vis some/no education that effectively reduced self-employment propensity. Sadek & Loutfy (2013) also found the effectiveness of a structured program in teaching entrepreneurship skills, within the academic framework. Based on a content analysis of 66 entrepreneurship education programs, Milan & Gurrisi (2017) found that it was framed as providing students with a collaborative learning experience, useful hands-on skills with real-world applications and an entrepreneurial mindset.

Qualitatively, there is evidence of important similarities and differences between entrepreneurship education programs offered in Canada and the US with regards to course content, pedagogical approaches and the learning materials used, sources of funding, and measures of the impact of entrepreneurship education (Ramani et al, 2018; Blok et al, 2014).

Objective

We conducted this research work with a rather straightforward intent. Acknowledging the importance of entrepreneurship education in the current and future scenario, our aim was to form a basic idea about the research landscape on the subject. Using bibliometric analysis, we wanted to probe mainly the following issues: What are the distinctive and core areas that research on the subject from Canada focus on? What are the main propositions (or findings) of researchers within each of the core areas? Can we bring together the areas of research to develop an overall scenario or proposition?

Methodology

We adopted qualitative research method and co-occurrence of key words. Words are counted for their presence in the documents using binary counting method - each word appearing with one another. The co-occurrence of words is run iteratively until the words with proximity (word pairs appearing together) are grouped into a cluster. Using VOSViewer 1.6.10 (created by Leiden University Center for Science and Technology), an open-source data analysis and visualization tool, we organized these constructs into various clusters which are color-coded. 51 peer-reviewed articles from EBSCO Host were considered. The key words used to extract the articles were 'Entrepreneurship' and 'higher education'. Only peer-reviewed articles published by Canadian researchers were considered. Only articles published in English were included in the analysis. Each of the most frequently occurring words in the corpus had to co-occur with another key word at least 4 times to be included in the analysis. This then allowed us to identify possible recurring themes based on the co-occurrence of key words across the corpus of 51 articles. Co-occurrence of key words extracted from these papers was used to identify the major themes. We represent the inter-connections between the constructs as a social graph.

This social graph is mapped based on distance. The key words extracted from the corpus are indicated as nodes. The distance between the nodes indicates the strength between them; the closer the nodes, the greater the affinity among them. The purpose of these maps is to present a distinct set of clusters (of nodes or key words) that lead to meaningful interpretation. This is achieved through the low-dimensional visualization, in which the nodes (key words) are located in such a way that the distance between any pair of nodes (key words) accurately reflects the similarity between them. Selecting a higher threshold for the co-occurrence of key words revealed nodes (key words) in the social graph that are disconnected. Only those key words with the highest link strength are captured in the social graph. This then occludes the other underlying research themes that may be present in the corpus. For example, for a co-occurrence threshold set at 5 (that is each node or key word co-occurs with another key word at least 5 times across the corpus), clusters with 1 or 2 key words were

extracted that were not meaningful. On the other hand, selecting a lower threshold for the co-occurrence (of key words) lead to two problems – redundancy of similar terms across different clusters, and generic key words that did not contribute to the thematic interpretation of the cluster. For example, in considering a co-occurrence threshold of 2 (each key word or a node co-occurs with another key word at least twice), terms such as ‘skill’ and ‘skills’, ‘women entrepreneurs’, and ‘women entrepreneurship’ appeared in more than one cluster. Key words such as ‘practices’, ‘development’, ‘business’, and ‘alternes’ were extracted that did not contribute to the interpretation of the cluster. Therefore, after an iterative process, an optimal co-occurrence threshold of 4 was considered for analysis (for a more detailed explanation of the algorithm, please refer to van Eck & Waltman, 2006).

Findings

The results of the bibliometric analysis reveal 28 most commonly occurring key words organized into 5 clusters. Each of these clusters are colour coded, representing specific themes. We named each cluster based on the inherent theme contained in the key words. The five clusters with the associated key words are as follows:

- **Cluster 1. Integration with business.** The key words in this cluster are: *business education, case studies, college students, college teachers, education work relationship, foreign countries, innovation, student attitudes, teaching methods.*
- **Cluster 2. Adopting a global approach.** The key words in this cluster are: *access to education, business, community colleges, competition, economic impact, educational needs, global approach, organization culture.*
- **Cluster 3. Academic research on entrepreneurship.** The key words in this cluster are: *education, entrepreneurship, entrepreneurship education, higher education, research, universities and colleges.*
- **Cluster 4. Robust education policy.** The key words in this cluster are: *education policy, governance, intellectual property, technology transfer, universities.*

institutions are called upon to develop workforce that is able to succeed in a dynamic business environment (Menna, Catalfamo & Girolamo, 2016). Higher education institutions engaged in delivering business education (especially) play an important role in advancing this purpose. For example, Ferrier (2013) points out that students studying entrepreneurship should be exposed to the business side of the organisations. Gonzales, Erogul & Barragan (2016) posit that entrepreneurship education in Canada is founded on ethics, the need to satisfy stakeholders in a global environment, and concerns such as corporate social responsibility (CSR) are central to global organisations. Furthermore, by designing education policies directed at understanding small and medium enterprises (SMEs) and innovative pedagogy, these institutions advance the entrepreneurial spirit among the learners (Menna, Catalfamo & Girolamo, 2016). The teaching methods align with this policy, where the instruction is complimented by hands-on and collaborative learning experience directed at nurturing the entrepreneurial mindset among the learners (Pizzaro & Gurrisi, 2017). An example of such innovative learning experience is practiced by a community college in Manitoba. For its apprenticeship trades education, the college adopted a blended learning approach. Parts of the course are taught online, and 8-10 weeks are dedicated for face-to-face instruction. This program is particularly successful in reaching out to learners in the remote parts of the province (Vogt, 2014).

Adopting a global approach

An important element of delivering successful programs in entrepreneurship is to understand how the higher education institutions such as colleges and universities respond to globalisation. Specifically, how do these institutes align their organisation culture to maintain a global approach in imparting entrepreneurial education (Burnett & Huisman, 2010). In part, the institution's culture is shaped by its leaders. The leaders excel in their ability to convince stakeholders about the importance of (entrepreneurship) education, emphasise a motto of lifelong learning, and forge collaborative partnerships globally (Miller & Plessis, 2014). Other factors, such as reduced government funding, and massification (rapid increases in student enrolment) also influenced the organization culture. Higher education institutions, in

their quest to survive the competition, adopted a differentiation strategy to attract and retain students (Mount & Belanger, 2004). The other facet of the institute's organisation culture is its assuming of entrepreneurial qualities. Especially in Canada, with reduced funding from the government, universities are creating new opportunities to raise funds, and conduct research that attracts funding (Quirke & Davies, 2002). A consequence of this economic impact is the increase in tuition fee. Students are compelled to rely on expensive loans and debt financing. Research also suggests that students from affluent backgrounds tend to be more successful than those from other socio-economic backgrounds. This then throws access to education for all students into conundrum (Quirke & Davies, 2002).

Academic research on entrepreneurship

Research and teaching are complementary activities in a modern university. It is no different for entrepreneurship programs in universities and colleges. Especially in Canada, community and university research partnerships are funded by Social Sciences and Humanities Research Council. Such partnerships have addressed community problems while imparting skills to students through collaborative learning (Tremblay & Hall, 2014). This model of entrepreneurial universities also finds some criticism. For example, Armbruster (2008) posits that funding commoditizes education – universities and colleges forsake their autonomy when conducting government or industry sponsored research. A concomitant argument presented earlier (Belanger, 1990) offers an alternative perspective to this problem of commoditizing research. Faculty members may be considered free-standing entrepreneurs, free to pursue their academic (teaching and/or research) interests. Fluctuations in performance resulting from this organisation of one's (academic) interests leads to workload inequity. A possible exposition to this problem is proposed by Rherrad (2009). This research concludes that distinctions need to be made between entrepreneurial and non-entrepreneurial universities. The nature of university has ramifications for the nature of knowledge production and transfer. Entrepreneurial universities and researchers are engaged in commercial knowledge transfer (to the funding agencies/ stakeholders). This idea is elaborated when discussing the

next research cluster – i.e., '*robust education policy*'. On the other hand, non-entrepreneurial universities and researchers conduct research with the aim of advancing knowledge. Such a distinction between the approaches to research, and universities' proclivity towards entrepreneurial mindset perhaps reconciles perceptions of workload inequity.

Robust education policy

The rise of entrepreneurial culture in universities leads to faculty who can frequently and successfully commercialise their knowledge. Termed as 'repeat commercialisers' (Hoye & Pries, 2009), these faculty are akin to habitual entrepreneurs. They are able to generate resources, and identify commercialisable inventions (Hoye & Pries, 2009). This naturally brings up the question of how such commercialisable activities should be governed in universities. Fraser (2010) considers one aspect of commercialisation of university research-technology transfer as an elucidation of governance of such programs. He concludes that there needs to be robust metrics to measure the success of technology transfer. Criteria such as external awards received, number of licensing deals, technology transfer budget at universities, number of eventual products created in the marketplace, and jobs created from the spin-off organisations. In order to enhance the role of technology transfer in knowledge economy, Fraser (2010) proposes that technology transfer-related activities should be better tracked, financial resources should be secured, the value of research activities should be communicated to stakeholders, and trusted by the academic leadership and the wider community.

Educational innovation

The ability to innovate – provide services in response to market demands is the cornerstone of successful businesses. The leitmotif of such an innovative business practice is sustainability. It refers to the achievement of economic objectives, while meeting the ecological demands and ensuring happiness for the larger community (O'Brien, 2013). Belkhir (2015) posits that this concept has to become a 'way of thinking' for students taking courses in entrepreneurship.

Organisations take two broad views about sustainable business objectives. The first is the competitive advantage perspective, where sustainability becomes a core objective to be achieved in the organization. The second is the strategic perspective. In here, organisations aim to reduce wastage at every stage of production, innovate their processes, re-utilize their resources, and achieve cost savings to the company responsibly. Belkhir (2015) underscores that both of these perspectives need to be incorporated when teaching entrepreneurship. More specifically, these perspectives are operationalized at the classroom teaching level through relevant course objectives, content and pedagogy. Belkhir (2015) provides an example of such an entrepreneurship course, where students understand sustainability holistically (gaining from multi-disciplinary perspective), and apply this learning in a group project.

Implications: Holistic view of Entrepreneurship Education

Entrepreneurial education has a significant impact on the creation of new ventures. It is important to understand the relevant learning- and institutional mechanisms, and the larger environment for a successful (entrepreneurship) education program (Ghina, Simatupang & Gustomo, 2014). The business environment today is characterized by rapid changes, inconsistency, and unpredictability (Oparaocha & Daniil, 2020). Schools need to be more open and closer to such business environments. Only then will they serve the larger purpose of developing students who are socially active and responsible. Universities need to be cognizant of the intellectual capital, knowledge (tacit and explicit), and competence that is available both within and outside their organisations. Only then will universities be able to deliver programs that will prepare students for a dynamic business environment. Therefore, integration with business is an important facet of entrepreneurial education. (Abrudan & Nastase, 2012).

Hitherto, universities were considered as 'arenas' for actors (faculty, administrators, researchers etc.) engaged in establishing cross-border collaborations. This was largely driven by the actors' interests, and values (Seeber, Meoli & Cattaneo, 2020). More recently, internationalisation has become a mission for modern universities. The

universities' strategies are derived from this mission (Seeber, Meoli & Cattaneo, 2020). Teaching and research activities are structured to advance this strategy (Kavusgil & Knigh, 2015). These efforts are not conceived and executed in a vacuum; rather it is a response to the dynamic business environment. Universities adopt various practices such as globalization of curriculum, international research collaborations, and encouraging student mobility. Thus, these higher education institutions adopt a global approach in their functioning. This is an important facet to entrepreneurial education (Seeber, Meoli & Cattaneo, 2020).

Higher education institutions have responded to global economic and financial crises. Societies have turned to higher education institutions to come out of crisis; building a smart, sustainable, and inclusive economy (Posselt, Abdelkafi, Fischer & Tangour, 2019). The economic strategies adopted support and promote entrepreneurship. These strategies are grounded in a robust education policy that promotes entrepreneurial activities, innovation, and competitiveness in education (Dahlstedt & Hertzberg, 2013). This then concludes that the governance of universities can no longer be conducted in silos, given that they are inextricably linked to the socio-economic issues. Universities and higher education institutions are scrutinized for the utilization of public money. Universities also adopt an entrepreneurial approach in vying for external funding, capitalization of their resources, and commercialize their knowledge. As such, universities design policies that support this entrepreneurial model of governance. They proactively seek new opportunities, and constantly innovate their practices (Tang & Chau, 2020). Thus, establishing a robust education policy to successfully administer the 'entrepreneurial university' is an important facet in entrepreneurship education management.

A distinctive characteristic of universities that adopt an entrepreneurial approach is the organizing of the research groups. Previous research (Etkowitz, 2003; Etkowitz et al. 2008) points to the university research groups assuming firm-like qualities (Tang & Chau, 2020). Knowledge creation, and exchange is commercialised. Specific university administrators and academicians coordinate this knowledge exchange and creation through research initiatives. Such research initiatives address issues such as knowledge exchange between university and industry, knowledge management for university

spinoffs, universities through their entrepreneurial initiatives supporting regional development, and new knowledge creation that will advance entrepreneurial education (Secundo, Ndou, Del Vecchio & De Pascale, 2019). Thus, pursuing academic research in entrepreneurship is an important facet driving the advancement of entrepreneurial universities and education.

Innovation and creativity are recognized as one of the most important competencies by organizations today. Entrepreneurship is generally associated with these two competencies (Boysen, Jansen & Knage, 2020). The choice of teaching pedagogy will significantly determine how well this competency can be developed in learners. Research has shown that organizing entrepreneurial learning is similar to developing entrepreneurial initiatives in the organization (Sörensson & Bogren, 2020). Johannisson et al. (2000) argue that the learning process in entrepreneurship programs is unique. Students should develop competencies related to the identification of opportunities, interaction, and managing a venture. Therefore, there is a strong relation between the entrepreneurial process, and entrepreneurial learning (Moustaghfir & Sirca, 2010). Gedeon (2014) posits that entrepreneurial learning includes the understanding of concepts such as owning a business, managing resources, acting as a leader, and meeting the socio-economic needs of the stakeholders. The program will require participation from business owners in program design and teaching (Zhang, & Hamilton, 2010; Ratten, 2017). Interactions, role plays, and learning from real situations form an important component of pedagogy (Zhang, & Hamilton, 2010). Huq & Gilbert (2017) provide specific recommendations for pedagogy that are grounded in constructivism. They call for a program delivery process that reduces the barriers between learners and educators. This is achieved through an increased use of roleplays, case studies, co-ownership of course design and delivery by students and educators, and by applying the principles of design thinking to continuously review the program and innovate. Thus, educational innovation, especially related to program design, and pedagogy is an important facet of successful entrepreneurial education.

Based on our research findings, we combine the five themes emerging from relevant research and integrate them in the following figure. We propose that a robust education policy supported by research in entrepreneurship and continuously revised through innovation in education can together create a fundamental synergy. When this is given a proper direction (a global approach), we have a collective mechanism that is appropriately integrated with business. As a result, we have educational institutions providing essential components as a combined force for a need-based, innovative, and sustainable economy.

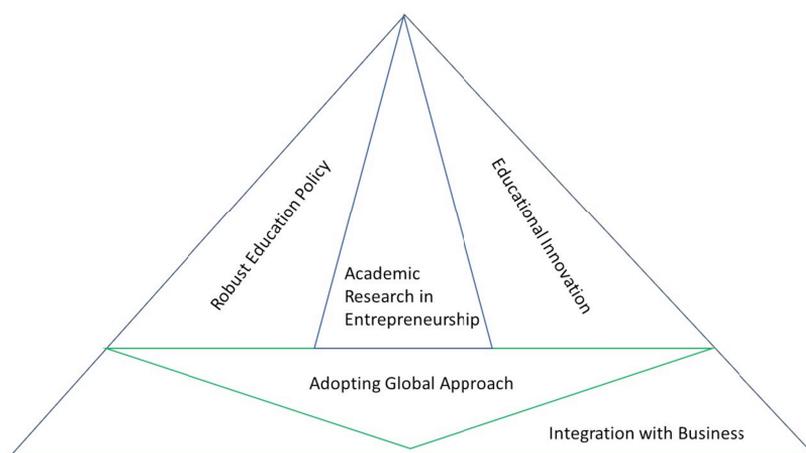


Figure 2. Holistic view: Entrepreneurship Education in Canada

Conclusions

Our research was aimed at finding the contours of research evidence on entrepreneurship education in Canada. Based on the bibliometric analysis and clustering of key words, we arrived at proposing five emergent themes as discussed earlier. It is evident that these themes are not uncorrelated or isolated, rather taken together, they provide us with a thematic scheme for entrepreneurship education. The holistic view that emerged points towards the importance of each component in designing education and training policies. The proposition is realistic and optimistic. We expect robust education policy, along with a focus on research and innovative

interventions, when executed with a global approach to offer us a successful strategy for doing business. The strategy should advance goals of entrepreneurship education in higher education institutions. Examples of such goals include seeking opportunities to commercially exploit knowledge, provide entrepreneurship access to students, and foster entrepreneurial skills and mindsets among students. These goals, and therefore, the higher education policy to advance entrepreneurship education must be championed by the faculty across various disciplines (such as business, engineering and technology), and by the decanal administrators (Industry Canada, 2010). The external scenario for entrepreneurship ventures is constantly evolving and it is difficult to predict. Therefore, universities (and other entrepreneurship training establishments) must take the responsibility of continuously evaluating the program structure, teaching method, and impact of their programs.

The scope of our literature review is restricted to entrepreneurship studies in higher education in Canada. Our future research will juxtapose these results with literature emanating from other economies. Insights into the institutional and contextual factors affecting entrepreneurship education, and policies pursued by higher education institutions in other countries will shed light on the opportunities and challenges for the (entrepreneurship) programs.

Extensive research would provide practical indications and/or directions for policy revision and program revision. Adopting a global approach is obligatory in today's connected world for any business. We do not expect the fundamental themes emerging from our analysis to lose their relevance in the near future as they are strongly interconnected. What we want to focus on is the manner in which educational institutions are evaluating their programs and reworking the curriculum, to maintain the value of education or training imparted to future entrepreneurs as well as the present ones.

References

- Abrudan, D., & Nastase, M. (2012). Realities and Challenges Concerning Entrepreneurship Education in Romania. *Review of General Management*, 16 (2), 126-138.
- Ahmad, N., & Hoffman, A. (2008). A Framework for Addressing and Measuring Entrepreneurship (No. 2008/2). OECD Publishing.
- Armbruster, C. (2008). Research Universities: Autonomy and Self-Reliance after the Entrepreneurial University. *Policy Futures in Education*, 6(4), 372–389
- Belanger, C. H. (1990). Faculty Performance and Workload Inequity. *Higher Education Management*, 2(2), 115–123.
- Belkhir, L. (2015). Embedding Sustainability in Education through Experiential Learning Using Innovation and Entrepreneurship. *Higher Education Studies*, 5(1), 73–80.
- Belanger, C. H. (1990). Faculty Performance and Workload Inequity. *Higher Education Management*, 2(2), 115-23.
- Blok, V., Lubberink, R., Lans, T., & Omta, O. (2014). Managing the improvement of entrepreneurship education programmes: a comparison of universities in the life sciences in Europe, USA and Canada. In *Handbook on the entrepreneurial university*. Edward Elgar Publishing.
- Boysen, M. S. W., Jansen, L. H., & Knage, M. (2020). To Share or Not to Share: A Study of Educational Dilemmas Regarding the Promotion of Creativity and Innovation in Entrepreneurship Education. *Scandinavian Journal of Educational Research*, 64(2), 211–226.
- Burnett, S.-A., & Huisman, J. (2010). Universities' Responses to Globalisation: The Influence of Organisational Culture. *Journal of Studies in International Education*, 14(2), 117–142.
- Canadian Chamber of Commerce. (2014). A path forward for entrepreneurship in Canada. Canadian Chamber of Commerce= la Chambre de commerce du Canada.
- Dahlstedt, M., & Hertzberg, F. (2013). In the name of liberation. *European Education*, 45(4), 26–43. DOI:10.2753/ EUE1056-4934450403
- Etzkowitz, H. (2003). Research groups as 'quasi-firms': the invention of the entrepreneurial university. *Research policy*, 32(1), 109-121.

- Etzkowitz, H., Ranga, M., Benner, M., Guarany, L., Maculan, A. M., & Kneller, R. (2008). Pathways to the entrepreneurial university: towards a global convergence. *Science and Public Policy*, 35(9), 681-695.
- Ferrier, M. B. (2013). Media Entrepreneurship: Curriculum Development and Faculty Perceptions of What Students Should Know. *Journalism and Mass Communication Educator*, 68(3), 222-241.
- Fisher, E., Reuber, R., (2010). *The State of Entrepreneurship in Canada*. Ottawa, ON: Industry Canada,
- Fraser, J. (2010). Academic Technology Transfer: Tracking, Measuring and Enhancing Its Impact. *Industry and Higher Education*, 24(5), 311-317.
- Gedeon, S (2014) Application of best practices in university entrepreneurship education: designing a new MBA program. *European Journal of Training and Development* 38(3): 231-253.
- Ghina, A., Simatupang, T. M., & Gustomo, A. (2014). A Systematic Framework for Entrepreneurship Education within a University Context. *International Education Studies*, 7(12), 1-19.
- Golob, M. I., & Giles, A. R. (2017). Immigrant entrepreneurship in Canada: sites for cultural preservation, inclusion, and community development. *Journal of Multicultural Discourses*, 12(1), 27-41.
- Gonzalez, S., Eroglu, M. S., & Barragan, S. (2016). Similarities and Differences in Teaching Corporate Social Responsibility: Evidence from Mexico and Canada. *Journal on Efficiency and Responsibility in Education and Science*, 9(3), 70-80.
- Hiebert, D. (2002). The spatial limits to entrepreneurship: Immigrant entrepreneurs in Canada. *Tijdschriftvoor economische en sociale geografie*, 93(2), 173-190.
- Hoye, K., & Pries, F. (2009). 'Repeat commercializers,' the 'habitual entrepreneurs' of university-industry technology transfer. *Technovation*, 29(10), 682-689. [https://doi-org.berlioz.brandonu.ca/10.1016/j.technovation.2009.05.008](https://doi.org.berlioz.brandonu.ca/10.1016/j.technovation.2009.05.008)
- Huq, A., & Gilbert, D. (2017). All the world's a stage: Transforming entrepreneurship education through design thinking. *Education & Training*, 59(2), 155-170. <https://doi-org.berlioz.brandonu.ca/10.1108/ET-12-2015-0111>

- Ibrahim, A. B., & Soufani, K. (2002). Entrepreneurship education and training in Canada: a critical assessment. *Education+ training*.
- Industry Canada (2010). The teaching and practice of entrepreneurship within Canadian higher education institutions (Cat. No. Iu188-103/2010E-PDF).
[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)
- Johannisson, B, Madsén, T, Wallentin, C (2000) Aha! Företagsamtlärande! Enskolaiförnyelse. Stockholm: Sveriges utbildningsradio.
- Knight, J. (2012). Concepts, rationales, and interpretive frameworks in the internationalization of higher education. *The SAGE handbook of international higher education*, 27-42.
- Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3-16.
- Kwak, M. J., & Hiebert, D. (2010). Globalizing Canadian education from below: A case study of transnational immigrant entrepreneurship between Seoul, Korea and Vancouver Canada. *Journal of International Migration and Integration/Revue de l'integration et de la migration internationale*, 11(2), 131-153.
- Masakure, O. (2015). Education and Entrepreneurship in Canada: Evidence from (Repeated) Cross-Sectional Data. *Education Economics*, 23(6), 693-712.
- Menna, A., Catalfamo, H., & Girolamo, C. (2016). Applied Entrepreneurship Policy: Ontario's Colleges in the Age of Globalization. *Educational Planning*, 23(2), 59-74.
- Milian, R. P., & Gurrisi, M. (2017). The online promotion of entrepreneurship education: a view from Canada. *Education+ Training*, 59(9), 990-1006.
- Miller, M., & Plessis, J. (2014). Leadership in Continuing Education: Leveraging Student-Centred Narratives. *Canadian Journal of University Continuing Education*, 40(2).
- Mount, J., & Belanger, C. H. (2004). Entrepreneurship and Image Management in Higher Education: Pillars of Massification. *Canadian Journal of Higher Education*, 34(2), 125-140.

- Moustaghfir, K, Sirca, NT (2010) Entrepreneurial learning in higher education: introduction to the thematic issue. *International Journal of Euro-Mediterranean Studies* 3(1): 3–26.
- O'Brien, C. (2013). Happiness and Sustainability Together at Last! Sustainable Happiness. *Canadian Journal of Education*, 36(4), 228–256.
- Oparaocha, G. O., & Daniil, P. (2020). Theatricalization of Enterprise Education: A Call for “Action.” *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*, 19(1), 20–35.
- Pizarro Milian, R., & Gurrisi, M. (2017). The online promotion of entrepreneurship education: a view from Canada. *Education + Training*, 59(9), 990–1006. <https://doi-org.berlioz.brandonu.ca/10.1108/ET-12-2016-0183>
- Posselt, T., Abdelkafi, N., Fischer, L., & Tangour, C. (2019). Opportunities and Challenges of Higher Education Institutions in Europe: An Analysis from a Business Model Perspective. *Higher Education Quarterly*, 73(1), 100–115.
- Quirke, L., & Davies, S. (2002). The New Entrepreneurship in Higher Education: The Impact of Tuition Increases at an Ontario University. *Canadian Journal of Higher Education*, 32(3), 85–109.
- Rahman, M. M. (2018). Development of Bangladeshi immigrant entrepreneurship in Canada. *Asian and Pacific Migration Journal*, 27(4), 404–430.
- Ramani, R. S., Solomon, G. T., & Alabduljader, N. (2018). Approaches to entrepreneurship education: a qualitative review and comparison of the US and Canada. In *A Research Agenda for Entrepreneurship Education*. Edward Elgar Publishing.
- Ratten, V (2017) Entrepreneurial universities: the role of communities, people and places. *Journal of Enterprising Communities: People and Places in the Global Economy* 11(03): 310–315.
- Rherrad, I. (2009). Effect of Entrepreneurial Behaviour on Researchers' Knowledge Production: Evidence from Canadian Universities. *Higher Education Quarterly*, 63(2), 160–176.
- Sadek, T., & Loutfy, R. (2013, September). Experiential Entrepreneurship Education in Canada-new Venture Creation While Earning a Masters Degree. In *European Conference on*

Innovation and Entrepreneurship (Vol. 2, p. 555). Academic Conferences International Limited.

- Secundo, G., Ndou, V., Del Vecchio, P., & De Pascale, G. (2019). Knowledge management in entrepreneurial universities: A structured literature review and avenue for future research agenda. *Management Decision*, 57(12), 3226–3257. <https://doi-org.berlioz.brandonu.ca/10.1108/MD-11-2018-1266>
- Seeber, M., Meoli, M., & Cattaneo, M. (2020). How Do European Higher Education Institutions Internationalize? *Studies in Higher Education*, 45(1), 145–162.
- Sörensson, A., & Bogren, M. (2020). Organizing an Entrepreneurial Learning Programme: The Role of People, Process and Place. *Industry and Higher Education*, 34(1), 13–23.
- Tang, H. H., & Chau, C. W. (2020). Knowledge Exchange in a Global City: A Typology of Universities and Institutional Analysis. *European Journal of Higher Education*, 10(1), 93–112.
- Tremblay, C., & Hall, B. L. (2014). Learning from community-university research partnerships: A Canadian study on community impact and conditions for success. *International Journal of Action Research*, 10(3), 376–404. <https://doi-org.berlioz.brandonu.ca/10.1688/UAR-2014-03-Tremblay>
- van Eck, N.J.P., & Waltman, L. (2006). VOS: A New Method for Visualizing Similarities between Objects (No. ERS-2006-020-LIS). ERIM report series research in management Erasmus Research Institute of Management. Erasmus Research Institute of Management. Retrieved from <http://hdl.handle.net/1765/7654>
- Vogt, R. (2014). Experiences with Blended Learning Program Delivery for Apprenticeship Trades: A Case Study. *International Journal of Higher Education*, 3(4), 85–95
- Zhang, J., & Hamilton, E. (2010). Entrepreneurship education for owner-managers: the process of trust building for an effective learning community. *Journal of Small Business and Entrepreneurship* 23(2): 249–270.