Region - Educational Research and Reviews, 2024, Volume6, Issue9
DOI: 10.32629/rerr.v6i9.2754
ISSN Online: 2661-4634
ISSN Print: 2661-4626

Curriculum development for innovation and entrepreneurship education: A business school - chamber of commerce resource synergy model

Yingping MAI

Business School, Guangdong Ocean University, Yangjiang 529500, China

Abstract: This paper explores curriculum development in innovation and entrepreneurship education through a "business school–chamber of commerce resource synergy" model. The model integrates educational and enterprise resources to enhance the effectiveness of the course, aimed at addressing key challenges such as misalignment with industry needs, the gap between theory and practice, and the lack of hands-on experience for students. The reform is driven by three main components: (1) industry-driven learning to strengthen students' entrepreneurial skills through practical teaching; (2) business-school industry collaboration to facilitate the two-way exchange of knowledge between academia and business, and (3) research-driven development to align academic research with the needs of local enterprises. The results demonstrate that this model effectively enhances student engagement, improves the practical relevance of course content, and provides valuable insights for developing innovation and entrepreneurship curricula that better align with market demands.

Key words: business school-industry collaboration; innovation and entrepreneurship education; curriculum development; university-industry collaboration; practical learning

1 Introduction

Innovation and entrepreneurship education plays a crucial role in fostering students' creativity and entrepreneurial mindset [1][2]. However, these educational programs often rely heavily on traditional theoretical instruction, which often falls short of motivating both educators and students to engage in practical innovation and entrepreneurship activities [3]. This gap highlights the need for a curriculum that not only delivers theoretical knowledge but also empowers students to creatively address real-world problems within dynamic business environments [4][5]. Therefore, a teaching approach that effectively integrates industry resources with higher education is critical to bridging this gap.

Despite the recognized importance of university-industry collaboration, significant challenges remain [6][7]. These include fully understanding the needs of local businesses, efficiently leveraging key resources, and aligning the requirements of universities and enterprises [1][4][8]. For business schools, two primary issues arise: How can both educators' and students' innovative and entrepreneurial capabilities be developed in tandem? And how can university innovation and entrepreneurship education be closely connected to local industry needs and societal development?

To address these challenges, this paper introduces a "business school–chamber of commerce resource synergy" model.

This model was designed to enhance curriculum relevance, foster practical experiences, and bridge the gap between theoretical knowledge and industry practices. Initially implemented in the Business School of X University (hereafter referred to as the "Business School"), this approach aims to serve as a practical and adaptable framework for reforming innovation and entrepreneurship education, with a focus on aligning academic content with real-world business demands.

2 Challenges of innovation and entrepreneurship education curriculum faced by business schools

Innovation and entrepreneurship education in business schools faces unique challenges that directly affect the quality and relevance of student learning. Firstly, there is a significant gap between educational resources and societal needs. Most of the curriculum are rooted in theory, often disconnected from the rapidly evolving demands of modern industries. This misalignment not only limits students' understanding of emerging business models and technological trends but also impedes their ability to identify and create new opportunities in the field of innovation and entrepreneurship [9]. For business schools, which must prepare students to navigate and contribute to a competitive market, this disconnection can significantly diminish the effectiveness of their education.

Secondly, current teaching methods often fail to address real-world business challenges [6][10]. For students to develop practical problem-solving skills, educators need a comprehensive grasp of not only entrepreneurial theories but also current industry practices and insights [9]. Without consistent engagement and communication with businesses, faculty may struggle to stay updated on market dynamics and enterprise needs. This lack of practical relevance can result in a curriculum that lags behind industry developments, thereby reducing the ability of students to apply what they have learned in authentic business contexts.

Lastly, the lack of practical experience opportunities for students remains a critical issue. In the context of a rapidly changing socio-economic landscape, traditional teaching models cannot meet students' growing demand for experiential learning [5][11]. For business school students, limited connections with local communities and businesses hinder their capacity to engage in hands-on practice, develop entrepreneurial skills, and respond creatively to real-world problems. This deficiency directly impacts their ability to generate innovative solutions and seize entrepreneurial opportunities in practical settings, including social practice activities and competitions.

These challenges are particularly pressing for business schools like the Business School of Guangdong Ocean University, which aims to develop industry-ready talent equipped to tackle contemporary business issues. Addressing these gaps to align education with industry needs, incorporating real-world challenges, and providing practical opportunities are essential for enhancing the overall quality and impact of innovation and entrepreneurship education.

3 Implementation of the "business school-chamber of commerce resource synergy" model

3.1 Preliminary investigation

To address these challenges, the "Business School" organized an innovation and entrepreneurship teaching team to conduct field visits to local enterprises and explore the reform of the innovation and entrepreneurship courses. Through these efforts, the team finds out the resource advantages and needs of all stakeholders to facilitate better resource synergy and complementarity. The findings revealed that the "Business School" possesses advantageous resources, including frontier knowledge, continuous talent output, and research achievement. However, current teaching and research lack support from real-world business cases, community contexts, and practical data of internships or practice bases. Meanwhile, local enterprises are eager to collaborate with the "Business School" to access fresh ideas and innovative solutions, but they generally lack access to cutting-edge theoretical knowledge and have underdeveloped talent pipelines. The strengths and needs of both parties are complementary, as illustrated in Figure 1.

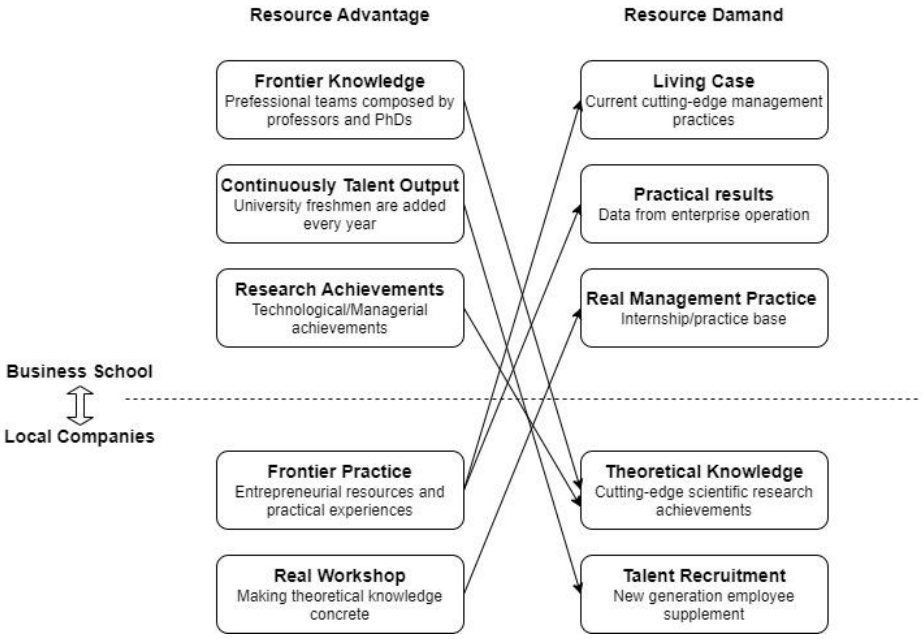

Figure 1. Resource advantages and needs of the business schools and chambers of commerce

Figure 1 illustrates a perfect match between the resource advantages and needs of the business school and local companies. The business school's advantages include frontier knowledge (professional teams composed of professors and PhDs), continuous talent output (the addition of new university students each year), and research achievements (technological and managerial accomplishments). These resources align well with the needs of local companies, such as living cases (demand for the latest management practices), practical results (data from enterprise operations), and real management practice (internship or practice bases). At the same time, the strengths of local companies, including frontier practice (entrepreneurial resources and practical experiences) and real workshops (making theoretical knowledge concrete), match the needs of the business school, which seeks theoretical knowledge (cutting-edge scientific research achievements) and talent recruitment (supplementing the new generation of employees). This complementary relationship fosters resource synergy and mutual benefits between the business schools and local companies, enhancing the integration of innovation and entrepreneurship education with real-world practice.

However, limited by newborn disadvantages, the connections between the "Business School" and local enterprises are still developing, and the traditional approach of one-on-one collaborations between business schools and individual companies is insufficient to rapidly meet the innovation and entrepreneurship education needs across disciplines within the "Business School". Based on the challenges faced by innovation and entrepreneurship education, as well as the complementary resource advantages and needs of the "Business School" and local enterprises, our team has identified three key issues for curriculum reform: (1) How can the "Business School" expand its practical teaching resources to help students enhance their innovation and entrepreneurial capabilities in line with societal needs? (2) How can the cutting-edge practices of local enterprises in innovation and entrepreneurship be effectively integrated into classroom teaching to facilitate the two-way flow of knowledge? (3) How can the needs of local enterprises be embedded into faculty research projects to ensure research outcomes better support the development of local industries?

3.2 Experimental methods

To address the above problems and strengthen connections between the "Business School" and local enterprises, we adopted the "business school–chamber of commerce resource synergy" approach. One aspect of this approach involved partnering with the Yangjiang New Generation Entrepreneurs Association to establish a "Collaborative Entrepreneurship

and Innovation Center". Another was forming an "Industry-Academia-Research Collaboration Framework for Innovation and Entrepreneurship" with the Yangjiang Overseas Chinese Business Association.

The implementation of this approach consists of three main components, as illustrated in Figure 2. Firstly, industry-driven learning: Leveraging the experiences of successful entrepreneurs and corporate environments to supplement the practical teaching resources of "Business School" and broaden the training channels for practice-oriented talent. Current and planned collaborative efforts include organizing internship and recruitment fairs to provide students with opportunities to engage with companies and learn about various industries while offering businesses a platform to identify and attract talent. Additionally, internship and practice bases are being established to immerse students in real work settings, facilitating the integration of theory and practice. Moreover, the "Excellence Talent Mentorship Program" is being launched, bringing in accomplished entrepreneurs to directly guide students in their career development and skill-building. This close collaboration between industry and academia not only enhances students' professional skills and innovation capabilities but also offers companies fresh perspectives and access to potential talent pools.

Secondly, business school-industry collaboration: Facilitating a two-way flow of knowledge by bringing entrepreneurs into the classroom and sending professors into enterprises. For practical knowledge dissemination, entrepreneurs are invited to share their innovation practices and entrepreneurial experiences, giving faculty and students more profound insights into current trends in the field. Regular lectures and field studies are conducted to disseminate advanced theoretical knowledge, allowing professors to work closely with enterprises and address real-world business challenges. For example, in response to the rise of generative artificial intelligence, faculty members recently delivered a lecture to local entrepreneurs titled "Applications and Prospects of AIGC in Business Management". These engagements establish a reciprocal bridge for the flow of innovative theory and practical knowledge.

Thirdly, research-driven development: Focusing on the development needs of key industries through research projects aimed at identifying innovative strategies and solutions tailored to local enterprises. By undertaking municipal-level planning projects, the "Business School's" research team conducts in-depth studies on local industry characteristics and socio-economic development. Surveys of typical enterprises help to summarize and extract successful experiences, forming a set of strategies that can drive the growth of local businesses. These research outcomes are expected to be used in regional government investment initiatives in the future, providing data support and theoretical guidance for local industry development.

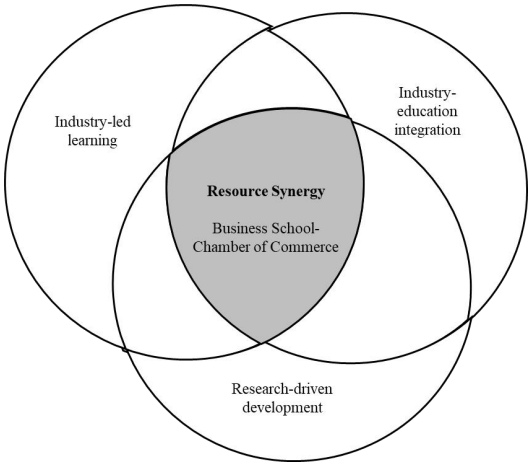

Figure 2. Business school – chamber of commerce resource synergy model

4 Results

These two initiatives have enabled the "Business School" to build a resource network of over 500 local entrepreneurs

and 130 member enterprises. Through collaborations with these associations, the "Business School" has been able to swiftly access and integrate a diverse range of corporate resources and needs. This collaborative model not only enhances resource utilization but also provides students and faculty with deeper insights into industry trends, corporate demands, and emerging market opportunities.

The innovative effects of the "business school–chamber of commerce resource synergy" model are mainly reflected in three areas. Firstly, the industry-driven learning approach has effectively bridged theory and practice, significantly boosting students' enthusiasm for innovation and entrepreneurship. By engaging with real work environments, students can gain a concrete understanding of the knowledge they have acquired, inspiring them to actively participate in social practice activities and innovation competitions. Many students have extended their coursework in innovation and entrepreneurship education to take part in various related competitions.

Secondly, the business school-industry collaboration approach promotes a two-way flow of practical experience and cutting-edge theoretical knowledge, enhancing the innovative capabilities of both academia and industry. The cross-fertilization of knowledge and experience between entrepreneurs and faculty members not only improves entrepreneurs' decision-making but also enhances teachers' foresight in their instruction.

Lastly, the research-driven development approach allows research projects to be aligned with corporate needs, increasing the practical value of research outcomes. This close integration of research activities with real-world needs further promotes the development and upgrading of local industries, providing solid support for regional economic growth.

In sum, by adopting the "business school–chamber of commerce resource synergy" model for the development of innovation and entrepreneurship courses, the "Business School" has not only effectively addressed the traditional gap between theory and practice in curriculum design but also rapidly established channels for communication and collaboration between academia and industry. This allows practical industry experience and market dynamics to be quickly integrated into teaching, making educational content more relevant to current needs. Additionally, the latest academic research and theoretical advancements from the university can be promptly conveyed to enterprises, helping to improve their management and innovation capabilities.

5 Limitations and future directions

While the "business school–chamber of commerce resource synergy" model has effectively bridged the gap between theory and practice in innovation and entrepreneurship education, its implementation is limited by a localized context, restricting exposure to diverse industry practices and broader perspectives. Additionally, the model heavily depends on active participation of local enterprises, which may vary in commitment and resources. Moving forward, expanding partnerships beyond the local level, such as collaborations with national and international chambers of commerce, can provide a more diverse range of experiences for students and faculty. Strengthening digital platforms to facilitate continuous engagement and collaboration, as well as establishing a structured assessment framework to measure long-term impacts, will be crucial in scaling this model to meet evolving educational and industry needs.

Acknowledgments

This work was supported by the Education and Teaching Reform Project of Guangdong Ocean University (PX-972024099) and Undergraduate Teaching Quality and Teaching Reform Project of Guangdong Ocean University (PX-142024012).

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Gibb AA. 1993. Enterprise culture and education: understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. *International Small Business Journal*, 11(3): 11-34.

[2] Kuratko DF. 2005. The emergence of entrepreneurship education: development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5): 577-597.

[3] Fayolle A, Gailly B. 2008. From craft to science: teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7): 569-593.

[4] Haghighi Talab A, Scholten V, Van Beers C. 2020. The role of universities in inter-organizational knowledge collaborations. *Journal of the Knowledge Economy*, 11(2): 458-478.

[5] Pittaway L, Cope J. 2007. Simulating entrepreneurial learning: integrating experiential and collaborative approaches to learning. *Management Learning*, 38(2): 211-233.

[6] Chen K, Zhang Y, Zhu G, et al. 2020. Do research institutes benefit from their network positions in research collaboration networks with industries or/and universities? *Technovation*, 94: 102002.

[7] Gretsch O, Salzmann EC, Kock A. 2019. University-industry collaboration and front-end success: the moderating effects of innovativeness and parallel cross-firm collaboration. *R&D Management*, 49(5): 835-849.

[8] Béchard J-P, Grégoire D. 2005. Entrepreneurship education research revisited: the case of higher education. *Academy of Management Learning & Education*, 4(1): 22-43.

[9] Neck HM, Greene PG. 2011. Entrepreneurship education: known worlds and new frontiers. *Journal of Small Business Management*, 49(1): 55-70.

[10] Bikard M, Vakili K, Teodoridis F. 2019. When collaboration bridges institutions: the impact of university–industry collaboration on academic productivity. *Organization Science*, 30(2): 426-445.

[11] Rae D. 2007. Connecting enterprise and graduate employability: challenges to the higher education culture and curriculum? *Education+ Training*, 49(8/9): 605-619.

About the author

Mai Yingping is currently teaching at the Business School of Guangdong Ocean University, a lecturer with a PhD in Management. Her main research areas include innovation and entrepreneurship, organizational resilience, etc. She lectures on college students' innovation and entrepreneurship education, entrepreneurship, corporate governance and other professional courses. E-mail address:ypmai@gdou.edu.cn