

Research on the Methods of Entrepreneurship Education in Innovation Workshops Based on Multilateral Business Models

Fei Gao^a, Lan Xia^b, Moli Wang^c

Jilin Communications Polytechnic, Changchun, Jilin, 130012, China

^agfeii@jljy.edu.cn, ^bxlan@jljy.edu.cn, ^cwmli@jljy.edu.cn

Abstract: *The innovation workshop entrepreneurship education system mainly focuses on the education goal of innovation and entrepreneurship, combines multilateral business models, and adopts a multi module teaching method. Its purpose is to teach students the basic knowledge and professional skills of innovation and entrepreneurship, cultivate and enhance students' innovation and entrepreneurship ability, and then meet the diverse needs of students for innovation and entrepreneurship. Starting from the education theory, the innovation workshop entrepreneurship education method should start from the elements of the business model to build a theoretical teaching system based on the multilateral business model, which is mainly divided into four parts, namely, value proposition, value creation, value capture and value delivery, and defines the teaching objectives and teaching content of different parts. From the perspective of educational practice, the innovation workshop entrepreneurship education should introduce high-level discipline competitions, formulate different teaching plans according to different business models, scientifically and efficiently analyze different elements of the business model, and then improve the amount of synergy between the elements of the business model and improve the business value. From the perspective of teaching objectives and teaching effects, the innovation workshop entrepreneurship education method studied in this paper should be student-centered, based on the current innovation workshop entrepreneurship situation, value creation oriented, and focus on cultivating and improving students' innovation and entrepreneurship ability.*

Keywords: *Multilateral Business Model; Innovation Workshop; Entrepreneurship Education; Educational Methods*

1. Introduction

With the continuous improvement of China's economic level, all walks of life are orderly achieving a higher level of progress and development. At the same time, China's colleges and universities are constantly providing various high-quality talents for our society. Therefore, the teaching quality of China's colleges and universities is the focus of the whole society. Innovation and entrepreneurship education is an important link in the education curriculum of China's colleges and universities. It not only reflects the importance that China attaches to innovation and entrepreneurship talents, but also reflects the teaching philosophy that China's higher education keeps pace with the times and makes every effort to provide high-quality talents for the society, which is also an inevitable demand for China's economic and social development.

However, it is worth noting that the current innovation workshop entrepreneurship education is facing difficulties. Among them, the most important problem is that it is difficult for students to find business value from their majors, and it is also difficult to put forward new business ideas. Moreover, even if students put forward new business ideas, it is also difficult to combine their professional knowledge and skills to put them into practice. Therefore, based on the past innovation and entrepreneurship situation, according to the characteristics and contents of different business models, this paper further designs and ponders the entrepreneurship education curriculum of Innovation Workshop, aiming to cultivate and improve students' innovation and entrepreneurship level, enhance students' business innovation ability and business development ability, so as to provide high-quality composite talents for the society.

2. Theoretical Basis

2.1. Multilateral Business Model

Multilateral business model is an important academic term in the current economic field, and it is also an important business phenomenon. With the rapid development of information technology, the multilateral business model continues to develop and progress. Visa, Google, Facebook, etc. are important representatives of the multilateral business model.

The rapid development of the multilateral business model means that this model has become one of the important business models in today's society. Through the network effect, it can continuously create value. It is a new business model, and there is huge business value behind it.

2.2. Innovation Workshop

Innovation workshop, in essence, can be regarded as an investment institution or an entrepreneurial platform.

The purpose of the innovation workshop is to provide entrepreneurs with investment opportunities and platforms in an all-round way, so as to provide high-quality innovative talents for the society, and to establish new high-tech enterprises.

Innovation workshops provide entrepreneurs with all-round entrepreneurial services, such as capital, business, technology, law, training, human resources, etc. These services can help entrepreneurs quickly establish startups, and also lay a solid foundation for the rapid and long-term stable development of startups in the later period, as shown in Figure 1.

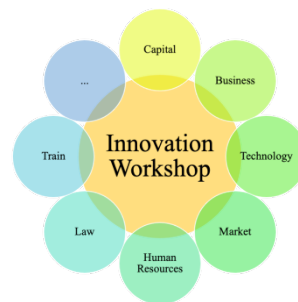


Figure 1: Innovation Workshop

2.3. Entrepreneurship Education

This book is a new exploration in terms of innovating talent training mode, improving teaching quality and school running efficiency, aiming to improve and enhance students' basic quality and ability of entrepreneurship, and provide help for students who are interested in entrepreneurship to enter the ranks of entrepreneurship after graduation. This book can be used by students in secondary and vocational colleges ^[1].

3. Innovation Workshop Entrepreneurship Education Content Based on Multilateral Business Model

3.1. Education Content

3.1.1. Teaching Purpose

According to the current situation of entrepreneurship education in innovation workshops, this paper proposes a new innovation workshop entrepreneurship education system based on multilateral business models. Its purpose is to fully realize the organic combination of theoretical education and entrepreneurship practice, and to improve students' business analysis ability and innovation ability for entrepreneurship projects based on high-level discipline competitions ^[2].

The innovation workshop entrepreneurship education method based on multilateral business model proposed in this paper can be divided into two main contents. First, business model design. This course

requires students to try innovative design on the existing business model. Specifically, it is to optimize and adjust the existing business model to meet the needs of more customer groups, provide customers with better products and services, and enrich previous products and services. Second, business model design. This course requires students to understand the business model of innovation workshop entrepreneurship projects, and optimize and design the business model of existing entrepreneurship projects, so that entrepreneurship projects can occupy a place in the growing market competition. In this course, students need to design and innovate according to the characteristics of the specific field where the entrepreneurial project is located, so as to truly improve the business value of the entrepreneurial project [3].

3.1.2. Teaching Content

The innovation workshop entrepreneurship education system based on the multilateral business model proposed in this paper adopts the module teaching method. This teaching model designs different teaching methods according to different modules. It uses the Osterwalder and Pigneur business model canvas knowledge system. The business model canvas knowledge system mainly covers the most important business model elements at present, including value proposition, customer segmentation, channel channel, customer relationship, key resources, key activities, key business partners, cost structure and revenue source. The business model canvas plays an important role in analyzing the business model of entrepreneurial projects. It can also help people deeply analyze the specific business content, specific operation model and future strategic development direction of entrepreneurial projects. These nine business model elements make the innovation workshop entrepreneurship education system proposed in this paper need to cover five aspects, namely, value proposition, value creation, value capture, value delivery and entrepreneurship practice, as shown in Figure 2.

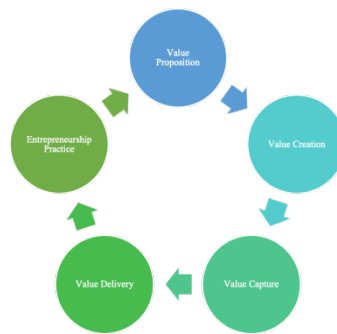


Figure 2: Five Contents of Innovation Workshop Entrepreneurship Education System

3.2. Teaching Design

The whole process of the innovation workshop entrepreneurship education method based on the multilateral business model proposed in this paper revolves around the concept of "value", which includes five main links, namely, value proposition, value creation, value capture, value delivery and entrepreneurship practice.

3.2.1. Value proposition

The teaching content and purpose of the value proposition teaching link is to enable students to understand the basic content of the business value proposition, and then comprehensively analyze the specific products and services of entrepreneurial projects according to the basic knowledge of the business value proposition they have learned, explore the advantages and functions of the products and services of these entrepreneurial projects, and analyze the value of the products and services of these entrepreneurial projects in combination with the needs of consumer groups. In the teaching process, teachers also need to let students independently combine their professional knowledge and skills in higher education to analyze whether the products and services of entrepreneurial projects can meet the different needs of current customers from multiple dimensions, including design, performance and function [4]. Therefore, in the whole innovation workshop entrepreneurship education content designed in this paper, the value proposition link is the core part of the teaching activity, and also the link of other teaching links.

3.2.2. Value capture

In the teaching link of value capture, there are three parts of teaching content, namely customer segmentation, channel channel and customer relationship. The teaching goal is to enable students to

understand how the products and services of entrepreneurial projects create user value (as shown in Figure 3).

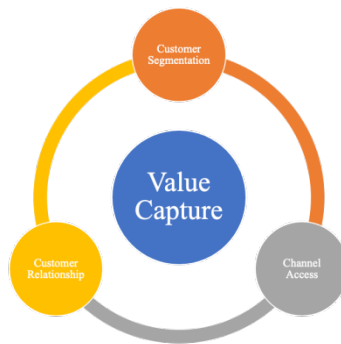


Figure 3: Value capture

Specifically, the teaching purpose of customer segmentation is to enable students to fully understand the products and services of entrepreneurial projects, so as to understand their local consumer groups, and further position and subdivide the products and services of entrepreneurial projects based on consumer behavior, consumer psychology, product positioning and other theoretical knowledge [5]. The teaching content and purpose of the channel channel part is to enable students to understand the value of the products and services of the entrepreneurial project, and further understand the channel network of the products and services of the entrepreneurial project, so as to understand the specific ways in which the entrepreneurial project delivers value propositions to the consumer groups. Channel channel is the link between products and services of entrepreneurial projects and consumer groups. It can be online or offline channels, or it can be jointly developed by online and offline channels. The teaching purpose of the customer relationship part is to enable students to fully understand the consumer groups faced by entrepreneurial projects and the mining of potential customer groups, so that students can understand the important business skills of building long-term and stable cooperative relationships with consumer groups.

3.2.3. Value Creation

The teaching link of value creation is composed of three teaching contents, namely, key resources, key partners and key activities. Its purpose is to enable students to comprehensively analyze the resources needed by entrepreneurial projects to provide products and services from three perspectives. Among them, the purpose of the teaching content of key resources is to enable students to understand the core resources that must be available in the business process of entrepreneurial projects, such as material resources, human resources, etc. It also requires students to have certain knowledge of R&D management and human resource management. The purpose of the teaching content of key partners is to enable students to study the role of partners in different fields of entrepreneurial projects, such as marketing, sales, research and development, from the perspective of the analysis of partners in the supply chain of entrepreneurial projects. The purpose of the teaching content of key activities is to enable students to understand the partners in entrepreneurial projects, and then combine business process management, supplier management, and risk management to ensure the smooth implementation of entrepreneurial projects.

3.2.4. Value Delivery

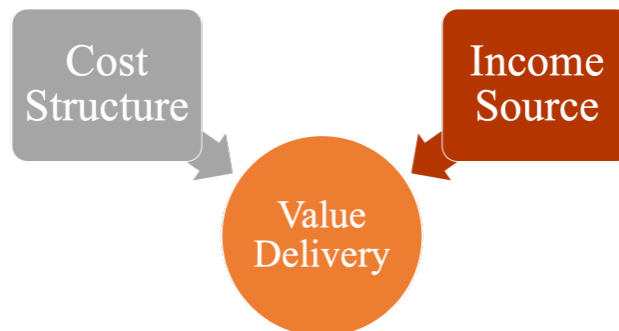


Figure 4: Value Delivery

The teaching link of value delivery mainly consists of two parts, namely, cost structure and income source. Its purpose is to enable students to understand the cost structure and income source of entrepreneurial projects, so as to better understand how entrepreneurial projects create value and how to realize the value of products and services, as shown in Figure 4.

Among them, the teaching content and purpose of cost structure is to enable students to independently calculate and analyze the costs required by entrepreneurial projects and calculate different types of costs, such as operating costs and sales costs, by teaching students basic knowledge and skills such as financial management and cost management. The teaching content and purpose of income source is to enable students to have the ability to analyze the income source of entrepreneurial projects based on the theories of financial management and value chain management, to calculate the profit generated by entrepreneurial projects, and to further optimize and adjust each link of entrepreneurial projects according to the income source and profit generation mechanism of entrepreneurial projects, thereby reducing the required cost of entrepreneurial projects Improve the profits of entrepreneurial projects.

3.2.5. Entrepreneurship Practice

The teaching content of the innovation workshop entrepreneurship education method based on the multilateral business model proposed in this paper is to teach students the ability to analyze the cost and profit of business models and entrepreneurial projects, so that students can better understand the value creation process of entrepreneurial projects, thus providing theoretical support and skill support for students to analyze entrepreneurial projects and independent entrepreneurship. The teaching link of entrepreneurship practice can be divided into three parts. First, let students understand how to determine the elements and resources required by the business model of entrepreneurial projects in the operation link from the perspective of consumer demand, and analyze how these elements and resources create value for entrepreneurial projects; Second, let students understand the relationship between the nine elements in the business model canvas, the collaborative development of these elements, and the interaction of these elements in the supply chain; Third, let students understand how the nine elements in the business model canvas create value and profits for entrepreneurial projects, and let students independently analyze the cost composition and income sources of entrepreneurial projects.

In addition, in the innovation workshop entrepreneurship education method proposed in this paper, we must also attach importance to students' business model analysis ability, so that students can combine their professional knowledge and skills, start from the relevant theoretical knowledge of business model analysis, and take business model analysis as a tool and means to understand entrepreneurial projects, then students can independently analyze and research the dynamic changes and transformation process of the business model of the entrepreneurial project^[6]. At the same time, colleges and universities should also pay attention to strengthening students' professional level, and require students to have certain business management ability, so that students can successfully carry out entrepreneurial projects.

3.2.6. Teaching Effect

The teaching effect of the innovation workshop entrepreneurship education method based on the multilateral business model proposed in this paper can be measured in two parts, namely from the entrepreneur perspective and from the entrepreneur perspective.

From the perspective of entrepreneurs, through learning the entrepreneurship education course of innovation workshop based on multilateral business model, students can have five abilities, namely entrepreneurial ability, management ability, marketing ability, technical ability and interpersonal ability.

From the perspective of entrepreneurs, students should have four abilities through learning the entrepreneurship education course of innovation workshops based on multilateral business capabilities, namely, system analysis ability, resource management ability, business learning ability and business risk bearing ability.

4. Conclusion

To sum up, as an important part of the innovation and entrepreneurship education system, the innovation workshop entrepreneurship education is an important test standard for the practice of higher education in contemporary society, and also an important embodiment of the innovative development and reform of China's higher education. The goal of innovation workshop entrepreneurship education is to comprehensively and efficiently cultivate and enhance students' innovation awareness, improve students' innovation level and entrepreneurship ability, and promote students to combine their

professional knowledge with innovation and entrepreneurship education, improve their professional quality and professional skills, and become the composite talents required by the current society through innovation workshop entrepreneurship education courses.

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References

- [1] Liguori, Eric, and Christoph Winkler. "From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic." *Entrepreneurship Education and Pedagogy* 3.4 (2020): 346-351.
- [2] Putro, Herry Porda Nugroho, et al. "Social Capital of Micro, Small and Medium Enterprises in Kampung Purun for Improving Entrepreneurship Education." *AL-ISHLAH: Jurnal Pendidikan* 14.2 (2022): 1669-1680.
- [3] Ndofirepi, Takawira Munyaradzi. "Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators." *Journal of Innovation and Entrepreneurship* 9.1 (2020): 1-20.
- [4] Secundo, Giustina, et al. "Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency." *Technological forecasting and social change* 166 (2021): 120565.
- [5] Jena, Roomesh Kumar. "Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study." *Computers in Human Behavior* 107 (2020): 106275.
- [6] Boldureanu, Gabriela, et al. "Entrepreneurship education through successful entrepreneurial models in higher education institutions." *Sustainability* 12.3 (2020): 1267.