

Insights from Innovation and Entrepreneurship Education in Business Schools in Three Countries: Evidence from China, the United States, and France

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Abstract: *With the acceleration of globalization, innovation and entrepreneurship have become important driving forces for promoting socio-economic development. This article compares and analyzes the innovation and entrepreneurship education in business schools in China, the United States, and France, explores the advantages and characteristics of each country in entrepreneurship education, and draws inspiration from them. American business schools focus on establishing a sound innovation and entrepreneurship ecosystem, emphasizing the combination of theory and practice, and providing rich policy support and financial guarantees; France focuses on interdisciplinary integration and the cultivation of an international perspective, emphasizing students' global competitiveness. China has made some progress in innovation and entrepreneurship education, but still faces challenges in practical orientation and ecological environment construction. This article points out that Chinese business schools can learn from the practical education model and government policy support in the United States, combined with France's internationalization concept, innovate and develop entrepreneurship education systems that are suitable for local characteristics, and provide support for cultivating more entrepreneurial talents with innovative thinking and practical abilities.*

Keywords: *innovation and entrepreneurship education, business schools, interdisciplinary integration*

1. Introduction

In the context of globalization and rapid technological development, innovation and entrepreneurship have become important forces driving national economic growth and social progress. Especially in the field of business education, innovation and entrepreneurship education is increasingly being incorporated into the curriculum of universities, becoming an essential part of cultivating future business leaders and entrepreneurs. Different countries have different practical experiences in innovation and entrepreneurship education in business schools, which not only provide valuable references for the development of their own education systems, but also provide useful insights for other countries.

As the world's second-largest economy, China is undergoing a transformation from traditional manufacturing to innovation driven development. In this process, innovation and entrepreneurship have become core components of national strategy. Therefore, how to effectively cultivate high-quality talents with innovative spirit and entrepreneurial ability has become an important issue in China's higher education reform. As the main battlefield for cultivating innovative and entrepreneurial talents, how to improve the teaching quality of business schools through innovative educational models, practical platform construction, and policy support has become a key issue that urgently needs to be addressed.

Business schools in the United States generally focus on the practicality of innovation and entrepreneurship, providing students with rich innovation and entrepreneurship resources through diversified methods such as entrepreneurship incubators, investment support, and school enterprise cooperation. French business schools focus on cultivating an international perspective, providing students with a global innovation and entrepreneurship environment through government policy support and cooperation with multinational corporations. These experiences and practices not only have practical guidance significance, but also provide important references for the improvement and enhancement of innovation and entrepreneurship education in Chinese business schools.

This paper aims to compare and study the current situation of innovation and entrepreneurship

education in business schools in China, the United States, and France, analyze their differences and similarities in educational models, practical platforms, policy support, etc., and propose corresponding improvement and development suggestions based on the actual situation in China. Through this comparative analysis, we hope to provide theoretical support and practical guidance for innovation and entrepreneurship education in Chinese business schools, and promote further reform and development of Chinese higher education, especially business education.

2. The current situation and practice of innovation and entrepreneurship education in business schools in China, the United States, and France

2.1 Innovation and entrepreneurship education in Chinese business schools

Innovation and entrepreneurship education in Chinese business schools started relatively late, but in recent years, with the country's emphasis on innovation driven development, this field has developed rapidly. The Chinese government has clearly stated in the "14th Five Year Plan" and the 2035 Vision Goal Outline that it is necessary to strengthen innovation and entrepreneurship education, and encourage universities to cultivate high-quality talents with innovative spirit and practical ability. Especially in the context of the construction of "Double First Class" universities, innovation and entrepreneurship education in business schools has received more policy support and resource investment.

Innovation and entrepreneurship education in Chinese business schools mostly adopts a curriculum based model that combines theory with practice. Many business schools focus on combining innovation and entrepreneurship theory with practical operations in their curriculum, by offering courses such as innovation and entrepreneurship fundamentals, enterprise management, marketing, etc., to cultivate students' business thinking and entrepreneurial skills. At the same time, many universities have also established innovation and entrepreneurship laboratories, entrepreneurship practice bases, etc., providing students with opportunities for practical operation.

The construction of practical platforms is an important component of innovation and entrepreneurship education in Chinese business schools. Many universities provide students with practical entrepreneurial opportunities by establishing entrepreneurship incubators, maker spaces, and entrepreneurial teams. Through the on campus entrepreneurship incubation platform, students can not only receive guidance from entrepreneurial mentors, but also collaborate with other entrepreneurs, share resources and experiences. In addition, some universities actively promote school enterprise cooperation and collaborate with well-known enterprises to carry out practical projects, allowing students to exercise their innovation and entrepreneurship abilities in practical work.

The Chinese government has provided significant policy support to promote innovation and entrepreneurship education. For example, various innovation and entrepreneurship competitions, entrepreneurship contests, and project financing plans provide students with opportunities to showcase and practice. Local governments have also actively responded to the national call by establishing innovation and entrepreneurship special funds and incubation bases to support promising entrepreneurial projects. Commercial banks and investment institutions have also begun to focus on collaborating with universities to provide financial support for student entrepreneurship projects.

Although Chinese business schools have achieved some success in innovation and entrepreneurship education, they still face some challenges. For example, some universities lack systematic and coherent innovation and entrepreneurship education, and the teaching content and methods still need to be further deepened and diversified. In addition, there is still a gap in the quantity and quality of practical platforms, and the entrepreneurial ecosystem in some regions is still not perfect.

2.2 Innovation and entrepreneurship education in American business schools

The exploration of innovation and entrepreneurship education in the United States is at the forefront of the world, especially under the influence of innovation highlands such as Silicon Valley [1]. The innovation and entrepreneurship education model of American business schools has attracted global attention. Business schools in the United States focus on integrating the cultivation of innovative spirit and entrepreneurial ability into the entire teaching system, and provide students with rich practical opportunities through cooperation with enterprises and governments.

Innovation and entrepreneurship education in American business schools places great emphasis on

cultivating students' practical skills. Many business schools in the United States offer interdisciplinary innovation and entrepreneurship courses, including not only traditional business management courses, but also a large number of courses on innovative thinking, technology entrepreneurship, product development, and more. Many schools have also launched entrepreneurship practice projects, allowing students to directly participate in the actual entrepreneurial process and solve practical problems. In addition, innovation and entrepreneurship education in American business schools places more emphasis on teamwork and project drive. Through teamwork, students can hone their entrepreneurial abilities in practical situations.

The innovation and entrepreneurship education in the United States is particularly prominent in the construction of practical platforms. Many American business schools have established entrepreneurship incubators and accelerators, providing resources and support to help students and alumni achieve their business dreams. These platforms not only provide office space and technical support, but also offer services such as funding, market promotion, and legal consultation for entrepreneurs. For example, well-known business schools such as Stanford University and Harvard University have top-notch entrepreneurship incubators that attract a large number of investors and entrepreneurs. On these platforms, students can not only receive financial support, but also establish connections with top investors and entrepreneurial mentors to promote the growth of projects.

The support of the US government and social resources in innovation and entrepreneurship education is very adequate. The federal and local governments provide strong support for entrepreneurs through policies such as tax breaks, startup funding, and entrepreneurial incentives. In addition, the venture capital industry in the United States is very mature, and many investment institutions are willing to provide financial support for college student entrepreneurship projects. The close cooperation between universities and investment institutions not only provides financial support for students, but also offers valuable market and industry resources for their entrepreneurial projects.

The successful experience of American business schools in innovation and entrepreneurship education is attributed to their profound innovation culture, strong financial support, and close cooperation network with the industry [2]. Innovation and entrepreneurship education in the United States places greater emphasis on cultivating students' innovation awareness, business sensitivity, and global perspective, providing them with a wide range of practical opportunities and entrepreneurial support.

2.3 Innovation and entrepreneurship education in French business schools

French business schools focus on cultivating students' international perspectives and cross-cultural cooperation abilities in innovation and entrepreneurship education, while strengthening the combination of theoretical knowledge and practical experience [3]. The innovation and entrepreneurship education system in France has its own uniqueness, focusing on integrating global resources, collaborating with multinational corporations, and emphasizing students' self-directed learning and the cultivation of innovative thinking.

The innovation and entrepreneurship education model of French business schools emphasizes the combination of a global perspective and interdisciplinary knowledge. Many French business schools combine innovation and entrepreneurship courses with international business, technology management, and other courses to cultivate students' diverse skills. The course covers various aspects from creative generation, business model design to company operation, emphasizing innovation and business management in the context of globalization. In addition, French business schools often focus on students' self-directed learning and project driven teaching, encouraging them to gain experience in solving practical problems.

French business schools are also actively promoting the construction of practical platforms, especially in the context of globalization. Many French business schools cooperate with multinational corporations to provide students with international entrepreneurial practice opportunities. For example, HEC Paris Business School in France has established close partnerships with numerous international companies, allowing students to participate in international projects during their time at school and enhance their global perspective. French universities also emphasize cooperation between students and innovative enterprises, encouraging students to transform their ideas into practical entrepreneurial projects through organizing entrepreneurship competitions, incubators, and other activities.

The French government also attaches great importance to supporting innovation and entrepreneurship education, especially through policies such as the "French Tech" program, which

provides funding, technology, and legal support for innovation and entrepreneurship. The entrepreneurial environment in France encourages a combination of venture capital and government support, providing a favorable ecosystem for student entrepreneurship. French entrepreneurship incubators are not limited to their own country, but provide students with broader international resources through cooperation with international incubation platforms.

Overall, innovation and entrepreneurship education in French business schools has significant advantages in internationalization, interdisciplinary studies, and global resource integration, providing students with rich opportunities for international entrepreneurship and innovation support.

3. Comparative analysis of innovation and entrepreneurship education in business schools in China, the United States, and France

3.1 Educational model and curriculum design

Chinese business schools started relatively late in innovation and entrepreneurship education, but in recent years, with the country's high emphasis on innovation driven development strategies, various universities have gradually established relatively complete innovation and entrepreneurship education systems. Chinese business schools generally adopt a model of "theoretical teaching+practical operation", with curriculum focusing on the cultivation of enterprise management, innovative thinking, and entrepreneurial skills. The innovation and entrepreneurship courses in Chinese business schools usually include basic courses such as "Innovation and Entrepreneurship Fundamentals," "Entrepreneurship Management," "Business Plan Writing," and "Venture Capital," while also strengthening interdisciplinary integration and offering forward-looking courses such as "Technological Innovation," "Big Data and Innovation and Entrepreneurship. For example, top domestic universities such as Tsinghua University and Peking University place great emphasis on practicality in the design of innovation and entrepreneurship courses, offering numerous entrepreneur lectures, entrepreneurship competitions, and practical training. Business schools often invite successful entrepreneurs, venture capitalists, and industry experts to participate in teaching and lectures to enhance students' practical abilities and industry connections.

American business schools are at the forefront of innovation and entrepreneurship education globally. Many universities began to establish entrepreneurship disciplines as early as the end of the 20th century, gradually forming a mature education system. The innovation and entrepreneurship courses offered by American business schools are very flexible. In addition to traditional courses such as "Entrepreneurship Management" and "Business Plan", they also include courses such as "Start up Financing", "Product Innovation and Design", and "Social Enterprise". American business schools emphasize personalized training and offer more flexible course arrangements, allowing students to choose based on their interests and career development. Harvard University, Stanford University, Massachusetts Institute of Technology and other business schools have offered courses focused on case analysis, which help students integrate theory with practice through classroom discussions, simulation experiments, and practical entrepreneurial projects. Unlike in China, business schools in the United States generally encourage students to engage in multiple entrepreneurial practices during their studies, and many schools even provide special entrepreneurship funds to support students in starting startups.

French business schools also place emphasis on practicality in innovation and entrepreneurship education, but compared to China and the United States, their educational model places more emphasis on a global perspective and cross-cultural exchange. French business schools typically adopt a combination of classroom teaching and business practice, with a particular emphasis on international course content and global business practices. In terms of curriculum design, French business schools focus on cultivating students' entrepreneurial spirit and cross-cultural communication skills, and incorporate innovative design, strategic management, and social responsibility into their courses. For example, HEC Paris Business School offers specialized innovation and entrepreneurship courses that focus on cultivating students' strategic innovation thinking, as well as a dedicated "Social Enterprise and Innovation" course aimed at combining social responsibility and entrepreneurial spirit.

3.2 Differences in innovation and entrepreneurship practice platforms

In terms of innovation and entrepreneurship practice platforms, Chinese business schools have made significant progress in recent years. Universities have collaborated with enterprises to establish platforms such as entrepreneurship incubators and accelerators, promoting students to turn their

entrepreneurial ideas into reality. Many schools also have innovation and entrepreneurship centers that provide comprehensive services such as entrepreneurship guidance, financial support, and market expansion. In addition, major universities in China actively organize entrepreneurship competitions, such as the "Challenge Cup" entrepreneurship competition, which provides students with opportunities to showcase their creativity and entrepreneurial abilities. However, despite the increasing number of innovation and entrepreneurship practice platforms in Chinese business schools, there are still problems such as insufficient resources and an imperfect venture capital environment. Especially in small and medium-sized colleges, the construction of entrepreneurial incubation platforms is not yet mature enough, and there are few practical opportunities.

The United States has significant advantages in the construction of innovation and entrepreneurship practice platforms. American business schools generally have innovation and entrepreneurship centers or incubators, which not only provide financial support, but also help students find mentors, provide market analysis and legal advice, and other services. Many American business schools work closely with startups and investment institutions to provide students with direct access to the entrepreneurial industry. For example, Stanford University's entrepreneurship incubator and MIT's "MIT Entrepreneurship Network" are very famous, providing students with rich entrepreneurial resources and practical opportunities. In addition, American universities also provide opportunities for students to showcase their creativity and seek investment through events such as "Entrepreneurship Competitions" and "Entrepreneurship Week". Entrepreneurial practice platforms are not limited to within the campus. Many universities also encourage students to participate in the local entrepreneurial ecosystem, establish connections with local startups, innovation parks, and investors.

The innovation and entrepreneurship practice platform in France is closely related to its educational philosophy. French business schools usually focus on cultivating students' cross-cultural entrepreneurial abilities and global perspectives, therefore, their innovation and entrepreneurship platforms often have international characteristics. Many French universities collaborate with multinational corporations, international entrepreneurship incubators, and government entrepreneurship programs to provide students with global innovation and entrepreneurship opportunities. Entrepreneurship incubators at French business schools typically provide one-stop entrepreneurship services, from initial market research to later fundraising, and then to global market expansion. Students can receive comprehensive support on these platforms. ESSEC Business School in Paris has extensive partnerships with multiple multinational corporations and investment institutions, providing entrepreneurial resources on a global scale.

3.3 Impact of government policies and social environment

The Chinese government has provided a lot of policy support in innovation and entrepreneurship education. In recent years, the country has implemented an innovation driven development strategy to encourage universities to carry out innovation and entrepreneurship education. The government provides various support policies for universities and entrepreneurs, such as tax reductions, entrepreneurial loans, and government subsidies. Local governments in various regions have also introduced various policies to promote entrepreneurship, providing more funding and market opportunities for startups. In addition, the attitude towards entrepreneurship in Chinese society has undergone significant changes, with young people being more willing to try entrepreneurship and the social environment encouraging innovation. However, there are still certain uncertainties in the entrepreneurial environment, such as risks in the capital market and uneven distribution of innovation resources, which affect the smooth development of innovation and entrepreneurship.

The innovation and entrepreneurship environment in the United States is jointly driven by multiple forces. The government has provided a favorable policy environment for innovation and entrepreneurship through measures such as tax reduction policies, entrepreneurial capital support, and entrepreneurship education funds. In addition, the investment market in the United States is mature, and start-up companies can easily obtain venture capital and angel investment, allowing entrepreneurs to quickly access the necessary resources. The attitude of American society towards entrepreneurship is very open, and many people have been influenced by the spirit of innovation since childhood. Successful entrepreneurial stories have inspired a large number of young people to join the ranks of entrepreneurship, while a mature entrepreneurial ecosystem has provided entrepreneurs with abundant resources and experience support.

The French government has also provided considerable support to entrepreneurs in terms of innovation and entrepreneurship policies. The French government has introduced various policies to

promote innovation, such as the "French Innovation Fund" and the "Young Entrepreneurs Program", which provide funding, market, and legal support for entrepreneurs. At the same time, the French government actively promotes "social innovation" and encourages entrepreneurs to pay attention to social responsibility and sustainable development, which is closely related to France's social values. The social environment in France also encourages innovation. Although the entrepreneurial risk and capital market in France are slightly conservative compared to the United States, in recent years, with the gradual improvement of the entrepreneurial ecosystem, the entrepreneurial atmosphere in France has been increasingly strengthened.

From educational models and curriculum settings to innovation and entrepreneurship practice platforms, government policies, and the influence of social environment, business schools in China, the United States, and France each have their own characteristics in innovation and entrepreneurship education. The United States leads the world in the construction of education systems and entrepreneurial practice platforms, while France focuses on cultivating students' international perspectives and social responsibility. China is gradually following suit in policy support and resource allocation, striving to create a favorable entrepreneurial environment. The experience of the three countries provides useful reference for global innovation and entrepreneurship education. In the future, education models and practical platforms can be further optimized based on the characteristics of each country, promoting the in-depth development of global innovation and entrepreneurship education.

4. The successful experience of innovation and entrepreneurship education in the three countries and the challenges faced by China

4.1 Successful experience of the United States

As a global leader in innovation and entrepreneurship, the United States has widely imitated its innovation and entrepreneurship education model and achieved significant results. Firstly, the United States has established a comprehensive innovation ecosystem, which combines government support, private sector investment, and university research and innovation to cultivate a strong entrepreneurial spirit and innovation awareness, especially in entrepreneurial concentration areas like Silicon Valley where innovation resources and talents are highly concentrated. Secondly, the close cooperation between American universities and enterprises, especially prestigious universities such as Stanford University and Massachusetts Institute of Technology, promotes the transformation and commercialization of scientific research results by providing entrepreneurship courses, incubators, and accelerator platforms, and cultivates entrepreneurs with international perspectives. In addition, government policies and funding support are also important factors for the success of entrepreneurship education in the United States, such as the entrepreneurship loans and active venture capital provided by the Small Business Administration (SBA), which provide financial support for innovation and entrepreneurship. Finally, entrepreneurship education in the United States emphasizes practice and project orientation. Many universities have established entrepreneurship laboratories and innovation centers, allowing students to conduct innovative experiments in practical environments, cultivate practical operational skills, and enhance problem-solving abilities.

4.2 France's successful experience

In recent years, France has made significant progress in innovation and entrepreneurship education, particularly in government policy promotion, interdisciplinary talent cultivation, integration of innovation and social responsibility, and the construction of entrepreneurship incubators and innovation networks. Firstly, the French government provides support to makers and entrepreneurs through policies such as the French Tech program, introducing tax incentives, start-up funds, and market access measures to encourage innovation and entrepreneurship in high-tech fields. Secondly, innovation and entrepreneurship education in France emphasizes the integration of interdisciplinary knowledge. In addition to technological innovation, it also emphasizes business models, law, marketing, and other aspects, enabling students to possess cross disciplinary abilities to cope with multidimensional problems encountered in the process of innovation and entrepreneurship. At the same time, entrepreneurship education in France emphasizes the spirit of social entrepreneurship, encouraging students to pay attention to social issues and promote solutions to social challenges such as poverty and environmental protection through entrepreneurship. In addition, many universities and technology parks in France actively promote the construction of entrepreneurship incubators and accelerators, helping students and young entrepreneurs achieve the transformation from ideas to products, and

through industry associations and investor networks, helping entrepreneurs establish connections and expand market space.

4.3 China's challenges and response strategies

As the most populous country in the world, China has made significant progress in innovation and entrepreneurship education in recent years. However, we are facing international competition and domestic economic transformation, China still faces a series of challenges in this field.

China's higher education system is vast and has high-quality basic education resources, but there is still a lot of room for improvement in cultivating innovative thinking and entrepreneurial spirit. Many educational models still focus on traditional exam oriented education, lacking emphasis on students' innovation, critical thinking, and practical skills. Therefore, it is necessary to strengthen the practicality of entrepreneurship education, reform traditional teaching models, encourage students to participate in social practice, corporate internships, and innovative projects, and improve their ability to solve practical problems. In addition, we can learn from the practices of the United States and France in interdisciplinary education to promote the integration and cultivation of different disciplines.

There are significant differences in China's innovative education resources among different regions and universities. Key universities and technology parks in big cities have a strong atmosphere of innovation and entrepreneurship, while some small and medium-sized cities and ordinary universities have relatively scarce innovation resources. We can strengthen the sharing and cooperation of educational resources between regions, and promote the tilt of innovative educational resources towards small and medium-sized cities and underdeveloped areas. In addition, policy guidance can be used to promote cooperation between enterprises and universities, establish more innovation incubation platforms and entrepreneurship incubators, and help local universities and enterprises enhance their innovation capabilities.

Although China's venture capital market is gradually maturing, many startups still face significant challenges in financing and market entry due to the complexity of policies, regulations, and market environment, which affects the transformation of innovative achievements. In this regard, the government can further optimize its venture capital policies, improve the legal system for venture capital and equity investment, enhance market transparency, and lower the threshold for entrepreneurship. At the same time, encourage cooperation between universities, enterprises, and investors to build a healthier and more diverse entrepreneurial ecosystem.

In China, traditional culture emphasizes stability and security, with less encouragement for adventure and failure. Innovation and entrepreneurship often require facing failure and risks, which conflicts with traditional Chinese values and cultural habits. Therefore, it is necessary to promote the transformation of social innovation culture, enhance tolerance for failure, and advocate the concept of "learning from failure". In addition, the government and education departments can strengthen the promotion of innovative culture, encouraging the public to recognize that innovation and entrepreneurship are not just commercial activities, but also important driving forces for social progress.

By drawing on successful experiences from other countries and combining them with China's own national conditions and development needs, improving the system of innovation and entrepreneurship education, and addressing existing challenges, China is expected to occupy a more advantageous position in global innovation competition.

5. Conclusion

Innovation and entrepreneurship education needs to be carried out in a systematic ecological environment. The successful experience of the United States shows that government policy support, private sector investment, and close cooperation between universities and businesses have jointly built a good innovation and entrepreneurship ecosystem, providing ample resources and opportunities for entrepreneurs. China can learn from this and strengthen cooperation between the government, universities, and enterprises to establish a more open and diverse innovation and entrepreneurship environment. France, on the other hand, emphasizes interdisciplinary integration and the cultivation of an international perspective in entrepreneurship education, which provides useful reference for Chinese business schools, especially in enhancing students' global competitiveness. The practice oriented education model is the key to promoting the effective implementation of innovation and

entrepreneurship education. American universities emphasize the use of entrepreneurship laboratories, incubators, and other platforms to enable students to learn innovation through practical experience. This model not only focuses on imparting theoretical knowledge, but also emphasizes the cultivation of practical operational skills. Chinese business schools still have significant room for improvement in this area, and should introduce more practice oriented teaching methods and encourage students to actively participate in real entrepreneurial projects. Financial support and policy guarantees are crucial for innovation and entrepreneurship education. The US government's entrepreneurship loans, venture capital, and tax incentives provide sufficient financial support, greatly promoting the vigorous development of entrepreneurial activities. China should also increase policy support for innovation and entrepreneurship, provide richer entrepreneurial funds and venture capital channels, in order to motivate more students to engage in entrepreneurial practice.

In summary, China, the United States, and France each have their own characteristics in innovation and entrepreneurship education, and have provided valuable experience for other countries. Chinese business schools can, based on their own characteristics and needs, draw on the ecosystem and practice oriented model of the United States, combined with France's international education philosophy, innovate and develop a suitable entrepreneurship education system for the local market, and contribute to cultivating more entrepreneurs with innovative thinking and practical abilities.

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