The Way of Integrating Innovation and Entrepreneurship Education into Professional Education in Colleges and Universities

Chengwei Cai, Dong Wang*
Department of Electronics and Communication Engineering, Suzhou Institute of Industrial Technology, Suzhou 215104, China

Abstract
At present, the problem of innovative and entrepreneurial talent training is gradually emerging. Therefore, it is more and more urgent to reform the teaching of innovation and entrepreneurship education in Colleges and universities. It is very necessary to integrate innovation and entrepreneurship education into professional education. This paper combs the successful models of integrating innovation and entrepreneurship education into professional education in Colleges and universities in major developed countries in Europe and America. Then, it summarizes the main problems of integrating innovation and entrepreneurship education into professional education in Chinese colleges and universities. Finally, drawing lessons from the European and American model, this paper puts forward an effective model for the integration of innovation and entrepreneurship education into professional education in Chinese colleges and universities.

Keywords
Innovation and Entrepreneurship Education; Professional Education; Integration.

1. Introduction
With the proposal of the national innovation driven development strategy, "mass entrepreneurship and innovation", the cultivation of innovation and entrepreneurship talents has become increasingly prominent. The reform of innovation and entrepreneurship education has become a hot issue in educational research under the new situation, especially focusing on the integration of innovation and entrepreneurship education into professional education mode in Colleges and universities.

2. The Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in Foreign Universities
2.1. Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in American Colleges and Universities
In 1947, Professor miles mace of Harvard Business School opened the new venture management, which opened the attempt and exploration of colleges and universities to incorporate innovation and entrepreneurship courses into professional education. In 1967, Baisen business school opened its first graduate course in entrepreneurship management, becoming the first college to launch the course in the world. So far, its entrepreneurship education course has been rated first in American news and world report for many times. Baisen business school is famous for its reform of entrepreneurship curriculum system. Baisen will focus on entrepreneurship awareness, entrepreneur quality The integration of entrepreneurial core competence and entrepreneurial practical experience to form an
integrated curriculum structure, which is not only rigorous in theory, but also practical. It is known as the model of entrepreneurship education curriculum in American colleges and universities. Up to now, 1600 universities in the United States have opened more than 2200 entrepreneurship courses, integrating innovation and entrepreneurship education courses into professional education. The curriculum system is relatively perfect, covering almost the problems encountered in the whole process of entrepreneurship planning, feasibility analysis, risk analysis and marketing, and offering a variety of compulsory courses for entrepreneurship education. Introduce the successful cases of entrepreneurship into the professional teaching classroom for discussion [1].

2.2. The Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in British Colleges and Universities

Entrepreneurship Education in British universities began to sprout in the 1970s. The government launched various employment training programs to encourage college students to start businesses to promote employment, with an obvious utilitarian tendency, but did not form a complete and independent concept of entrepreneurship education. In the 1980s, British higher education carried out reform and advocated "entrepreneurial universities". In 1982, the British government issued the "College Students' entrepreneurship" project. In 1987, the British government launched the "higher education entrepreneurship" plan to bring entrepreneurship education into the curriculum system. Since the 21st century, entrepreneurship education in British universities has developed rapidly. Entrepreneurship courses have been added to the original professional education, forming an embedded interactive mode of integrating innovation and entrepreneurship education into professional education. Entrepreneurship education courses in British universities are mainly divided into entrepreneurship courses and entrepreneurship courses. The former focuses on the cultivation of theoretical level, mainly including college students' entrepreneurial consciousness, entrepreneurial spirit, entrepreneurial thinking and entrepreneurial attitude, mainly using traditional teaching methods; The latter focuses on the cultivation of practical level, mainly including college students' entrepreneurial practice ability, operation skills and even starting enterprises, and mainly adopts experiential teaching methods. Herawat University, Cardiff University and Leeds City University should be models of this model [2].

2.3. The Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in German Colleges and Universities

Germany is the largest economic power in Europe, and the innovation ability of small and medium-sized enterprises in Germany is second to none in Europe, all of which benefit from the successful innovation and entrepreneurship education model in Colleges and universities. The basic course system of innovation and entrepreneurship in German universities is relatively complete. The courses cover the fields of enterprise establishment, financial management and enterprise management. The specific contents include important courses such as entrepreneurship policy, business plan writing training, enterprise establishment process and enterprise operation, which has laid a solid foundation for college students' Entrepreneurship and employment. In the same field, both comprehensive and applied universities will cooperate closely to jointly cultivate high-quality innovation and entrepreneurship projects, so as to create a strong atmosphere for the integration of innovation and entrepreneurship education into professional education. Munich University of technology is the first university in Germany to be rated as excellent. It takes entrepreneurial university as the strategic goal of university development and has won praise from the German government for its excellent innovation level. Munich University of technology strengthens the connection with the business community in the curriculum, infiltrates the management course into all majors, pays attention to the cultivation of College Students’ innovation and entrepreneurship
ability, integrates entrepreneurial experience and management scientific knowledge into professional education, and effectively improves the comprehensive quality of college students [3].

2.4. The Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in French Colleges and Universities

Entrepreneurship Education in France started a little late. In 1978, French higher business schools opened the "entrepreneur" course, which opened the prelude to entrepreneurship education in French universities. In the late 1990s, France began to pay attention to integrating entrepreneurship education into professional education, integrating entrepreneurship education into the curriculum system, broadening basic courses, reducing professional courses, paying attention to interdisciplinary integration, increasing interdisciplinary courses, setting up entrepreneurship courses that are progressive and organically connected in turn, and designing the course contents step by step according to the needs of students, Improve college students’ comprehensive ability and cultivate college students’ entrepreneurial skills. Lyon business school in France is a model of the integration of innovation and entrepreneurship education into professional education mode in French universities. Lyon business school has a relatively complete design of entrepreneurship courses, including the cultivation of entrepreneurship awareness and attitude, the study of innovation and entrepreneurship theory, and the training of innovation and entrepreneurship skills, such as undergraduate courses such as establishing entrepreneurship team and entrepreneurship project, and master’s courses such as entrepreneurship analysis, strategic management of small and medium-sized enterprises, business innovation and new enterprise growth Courses such as entrepreneurship, enterprise venture capital and venture capital financing, as well as courses such as social entrepreneurship, innovation management and internal talent plan at the doctoral stage, integrate courses closely related to all links in the whole process of entrepreneurship with courses of different disciplines [4-5].

3. Problems in the Integration of Innovation and Entrepreneurship Education into Professional Education in Colleges and Universities in China

Many countries in the world attach great importance to innovation and entrepreneurship education and implement a series of policies and measures. However, due to differences in system and mechanism, resource endowment and market environment, the success rate of innovation and entrepreneurship varies greatly in different countries. According to relevant statistics, the success rate of entrepreneurship in the United States is less than 10%, that in Germany is 7.2%, while that in China is less than 1%. The innovation conversion rate in the United States and Germany is nearly 40%, and that in China is changing In recent years, many colleges and universities in China have made great efforts to integrate innovation and entrepreneurship education into professional education. Although they have achieved certain results, there are still some problems in the implementation process, mainly as follows:

3.1. The Curriculum System is Not Perfect

The curriculum is the basic way of talent training in Colleges and universities. The imperfect curriculum system hinders the integration of innovation and entrepreneurship education into professional education. Zeng Qiuju pointed out that the innovation and entrepreneurship curriculum is lack of pertinence and effectiveness.
3.2. The Faculty of Innovation and Entrepreneurship is Weak

The Faculty of innovation and entrepreneurship in Colleges and universities is relatively weak and lacks special innovation and entrepreneurship guidance teachers. Most of the teachers of professional courses have no enterprise work experience, lack practical experience in starting enterprises, enterprise management and entrepreneurial skills, lack innovative and entrepreneurial thinking, and can not combine the teaching of professional courses with the practice of innovation and entrepreneurship, It is far from meeting the teachers’ needs of innovation and entrepreneurship education in Colleges and universities.

3.3. The Construction of Training Practice Platform Lags Behind

The construction of training bases in most colleges and universities lags behind, and the integration of students’ training and courses is not deep. Enterprises do not pay much attention to and participate in innovation and entrepreneurship education in Colleges and universities, and the construction of school enterprise cooperation practice platform is not strong.

4. The Mode of Integrating Innovation and Entrepreneurship Education into Professional Education in Colleges and Universities in China

The development modes of integrating innovation and entrepreneurship education into professional education in Colleges and universities in China mainly include curriculum system leading mode, entrepreneurship teacher leading mode and practice platform leading mode. Learning from the experience of European and American countries, colleges and universities in China can adopt one leading mode or a variety of leading modes. The three leading modes are dynamically compatible and cooperate with each other.

4.1. Curriculum System Oriented Model

At present, some colleges and universities begin to adopt this model, such as Tsinghua University and Renmin University of China, "focusing on cultivating students' entrepreneurial consciousness and improving students' comprehensive quality”, we should attach importance to both professional courses and innovation and entrepreneurship courses, combine theoretical teaching with practical teaching, and integrate the cultivation of entrepreneurial skills and innovative spirit into professional teaching. This model needs to adjust the traditional teaching objectives and teaching schemes, increase the proportion of elective courses and practice class hours, and integrate "entrepreneurship", "innovation management" and "entrepreneurship management" And other innovation and entrepreneurship education courses are integrated into the professional curriculum system, changing the traditional education mode dominated only by professional courses, better realizing the unity of talent training objectives between colleges and enterprises, integrating the curriculum system by disciplines, majors, levels and steps, and teaching students according to local conditions, school conditions, personal conditions and aptitude, so that college students can learn according to their interests and hobbies The ability to take courses of this major and other specialized courses across colleges in a planned way, while constantly expanding the selection range of elective courses, infiltrating the excellent quality, entrepreneurship and industry spirit required for enterprise establishment, business operation and entrepreneurship management into the curriculum system, encouraging and guiding college students to actively participate in innovation and entrepreneurship practice activities, so as to achieve effective connection after class, so that college students can internalize the course knowledge into innovation and entrepreneurship skills and effectively transfer it to innovation and entrepreneurship practice activities.
4.2. **Entrepreneurial Teacher Oriented Model**

This model attaches importance to the selection and specialized training of teachers engaged in innovation and entrepreneurship education, encourages qualified teachers to serve as innovation and entrepreneurship education courses, carries out case demonstration teaching, exchanges practical teaching experience, and effectively improves the effect of innovation and entrepreneurship education. On the one hand, it promotes teachers to enterprises, encourages college teachers to go deep into enterprises for temporary training, participate in the entrepreneurial process, and participate in enterprise operation and management services. Service activities, take the work done by teachers to enterprises and the contributions and achievements made by teachers to the improvement of enterprise production and operation performance as an important content of teachers' performance assessment, so that teachers can better experience all links of the process of innovation and entrepreneurship, have a deeper and more thorough understanding and understanding of innovation and entrepreneurship, and better integrate the theoretical knowledge and practical experience of innovation and entrepreneurship. On the other hand, employ successful entrepreneurs with rich entrepreneurial experience and practical experience to serve as part-time teachers of innovation and entrepreneurship courses, or invite well-known entrepreneurs and senior decision-making managers at home and abroad to give academic lectures or reports to college students, and explain the innovation of industry development to college teachers and college students Concept, impart innovation and entrepreneurship experience, operation and management experience, enterprise founding skills, and carry out demonstration teaching, so that college students can not only master professional theory and innovation and entrepreneurship theoretical knowledge, but also get timely and efficient practical guidance. This model can realize the effective combination of college resources, enterprise resources and social resources, realize the complementary advantages of enterprise guidance and college education, and promote the development of college education Innovation of student talent training mode.

4.3. **Practice Platform Oriented Model**

This model requires colleges and universities to pay attention to strengthening the construction of innovation and entrepreneurship practice platform. On the one hand, increase the capital investment in university training base, expand the scale of training base, optimize the allocation of university resources, and create good hardware facilities and equipment for college students' On-campus training; At the same time, we will build a number of school level and college level innovation and entrepreneurship guidance service platforms to provide consulting and guidance services on employment and entrepreneurship related issues for college students with strong willingness to innovate and entrepreneurship and talent for innovation and entrepreneurship, help college students establish a good awareness of innovation and entrepreneurship, reasonably plan the road of employment or entrepreneurship, and help job seekers frustrated College graduates who encounter difficulties in Entrepreneurship recognize the situation, rebuild self-confidence and find a way out. On the other hand, learn from the teaching experience of foreign developed countries, pay attention to strengthening the cooperation with enterprises, labor and employment departments in employment and entrepreneurship practice, and establish a short-term training mechanism by using the equipment, raw materials and practice sites provided by enterprises, labor and employment departments, so as to provide convenient conditions for college students' innovation and entrepreneurship skills training; Strengthen the close cooperation between universities and enterprises, organize students to enter enterprises, be familiar with the needs of the industry, participate in enterprise management activities, stimulate college students to cultivate innovative and entrepreneurial ideas in combination with professional theories, and design
innovative and creative products through enterprise production; Work together to build an innovation and entrepreneurship incubation base, so that the excellent achievements of innovation and entrepreneurship produced by colleges and universities can be industrialized through the enterprise platform, accelerate the transformation of innovation and entrepreneurship achievements of colleges and universities into the market, and further realize the high-quality development of innovation driven local economy.

Acknowledgments

This work is supported by the project of Jiangsu Higher Education Society (2019JSJG493).

References


