Thoughts on the Development of Innovation and Entrepreneurship Education in Chinese Universities

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Abstract: In the past 30 years, the Chinese economy has achieved remarkable achievements. Innovation and entrepreneurship are the driving force for China's continued development and progress, and has attracted attention from all walks of life. As one of the important bases for training talents, the development of innovation and entrepreneurship education in Colleges and universities has attracted much attention. Innovative entrepreneurship education in developed countries such as the United States, Japan, and Europe has the characteristics of perfect system, strong financial support, focus on practical training, and focus on cultivating students' innovative thinking and divergent thinking. To develop innovative and entrepreneurial education, China needs to learn the educational experience of developed countries, and further improve its curriculum system, the construction of teaching staff, and the practical training and optimization evaluation methods of innovative and entrepreneurial courses.

Introduction
Innovation is the soul of a nation's development. With the advent of the era of knowledge economy, innovative and entrepreneurial talents play an important role in economic development and the construction of innovative countries. All countries pay more attention to the development of innovation and entrepreneurship education in colleges and universities. The 18th National Congress of the Communist Party of China proposed to implement the "innovative development drive strategy". The General Office of the State Council also issued the "Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Colleges and Universities" to vigorously promote the development of innovation and entrepreneurship education. At present, China's innovation and entrepreneurship education is developing rapidly. And the cultivation of innovative and entrepreneurial talents has become an important task for universities in China's "13th Five-Year Plan". But there are still many problems. Therefore, it is very important for China to learn from the experience of some developed countries in innovation and entrepreneurship education in universities.

Development of Developed Countries in Innovation and Entrepreneurship Education in Colleges and Universities
Innovation and entrepreneurship education has been in development for more than half a century. The Massachusetts Institute of Technology first included the creation of college education in university education. Well-known universities such as Stanford University, Harvard University, and the University of California have also launched activities and courses
related to innovation and entrepreneurship education. In the late 1960s, several well-known economists at the Babson Business School first proposed entrepreneurship education. In the 21st century, some EU countries have introduced a series of guidelines and policies for the innovation and entrepreneurship education of colleges and universities, which have a major impact on the innovation and entrepreneurship education in Western countries.

Innovation and entrepreneurship education in developed countries such as Europe and the United States is becoming more and more mature and has achieved good results. The innovation and entrepreneurship education system in the United States is relatively perfect. It has clear talent training objectives, perfect discipline system, strong teachers and systematic curriculum. It pays attention to the cultivation of students' innovation and entrepreneurship. The education content covers a wide range of junior high school, senior high school, undergraduate and postgraduate stages. Its innovation and entrepreneurship education is mainly applied, focusing on the effective combination of educational achievements and market, especially in high-tech projects. Innovation and entrepreneurship education in Britain was originally designed to create more employment opportunities for college graduates and ease employment pressure. However, with the development of time and the continuous improvement of employment rate, the British government began to change the educational purpose of innovation and entrepreneurship to cultivate entrepreneurship quality and popularize it throughout the country. At present, it also has a fairly high level, with the characteristics of unbalanced regional development, emphasis on business courses, and lack of risk-taking spirit. Germany is a strong country in Vocational education, and its government has given strong support to innovation and entrepreneurship education in terms of policy and funding. The scientific literacy of German entrepreneurs is relatively high. Most entrepreneurs have bachelor's degrees. They focus on high-tech fields and have a high level of entrepreneurship. In the 1980s, Japan pursued the strategy of "building a country through science and education". And innovation and entrepreneurship education began to attract much attention. Initially, the purpose was to train a large number of entrepreneurs to promote Japan's economic development and relieve the pressure of the global financial crisis on Japan's economy, which had a strong utilitarian nature. However, with the alleviation of the economic crisis, in recent years, it has gradually become geared to the public. It has the characteristics of government-led, University and society-assisted completion, strong regionality and coherence of education system.

The Status quo of Innovation and Entrepreneurship Education in Chinese Universities

In the 1980s, Shanghai Jiaotong University first introduced the concept of creation. First Tsinghua Entrepreneurship Design Competition in 1998 marked the beginning of China's innovation and entrepreneurship education. At the beginning of 2002, the Ministry of Education established pilot schools for entrepreneurship education at nine universities including Tsinghua University, Shanghai Jiaotong University, Renmin University of China, and Beijing University of Aeronautics and Astronautics, etc. In recent years, universities have paid more and more attention to innovation and entrepreneurship education. Many schools incorporate innovation and entrepreneurship education into their school development plans. They set up innovation and entrepreneurship experimental centers, university science parks, innovation and entrepreneurship incubator bases, research centers, and various research and practice platforms for innovation and entrepreneurship. Overall, China's innovation and entrepreneurship education has the characteristics of a late start and rapid development. At
present, there are three main modes of innovation and entrepreneurship education in China. One is the combination of the first classroom and the second classroom represented by Renmin University of China. It is mainly through special lectures, business plan competitions, entrepreneurial projects, and social organization entrepreneurship education activities. Students' awareness of innovation and entrepreneurship and increase students' knowledge of innovation and entrepreneurship; The other is the entrepreneurial combat mode represented by Beijing University of Aeronautics and Astronautics and Zhejiang University. It is to improve Students' entrepreneurial knowledge and entrepreneurial ability and cultivating their innovative and entrepreneurial qualities by the establishment of experimental centers, innovation and entrepreneurship parks, innovation and entrepreneurship bases, innovation and entrepreneurship research centers; The third is the comprehensive model represented by Tsinghua University and Shanghai Jiaotong University. It is to cultivate students' innovative entrepreneurship and improve them Entrepreneurial skills by the science park, practice platform, entrepreneurship education curriculum. Compared with the United States, Germany, the United Kingdom, Japan and other countries, the main problems in China's innovation and entrepreneurship education first is the establishment of the education system is not perfect, and the orientation is not strong. Although many innovation and entrepreneurial competitions have been launched, most of the competitions lack scientific and technological content, and the innovation and entrepreneurial achievements are not highly compatible with market demand; Secondly, the curriculum design is not reasonable enough, and the innovation and entrepreneurship education is marginalized. Most of the schools' innovation and entrepreneurship courses are set to Elective courses or public courses lack professionalism. Many schools' innovation and entrepreneurship education is carried out in the form of competitions. Only a small number of students participate, and most students do not know much about innovation and entrepreneurship education. Thirdly; students' understanding of innovation and entrepreneurship not enough. Many colleges and universities fail to guide students to correctly understand the connotation of innovation and entrepreneurship education. They believe that innovation and entrepreneurship education is to cultivate successful entrepreneurs; The Fourth is lack of practical training. Most colleges and universities are still adopting traditional teaching methods. The form of the roll-up test is carried out. Although some colleges and universities choose to cooperate with enterprises to give students practical opportunities, most of the internships given by enterprises are at the technical level, and there are few posts that can cultivate students' innovative thinking.

Similarities and Differences between Innovation and Entrepreneurship Education in Chinese and Foreign Universities

In terms of Educational Philosophy

As a country with an early development of innovation and entrepreneurship education in the world, the United States has a relatively complete education system and a sound curriculum. The UK's innovative entrepreneurship education curriculum focuses on business courses and enables online sharing. Australia further improved the curriculum on the basis of the original innovation and entrepreneurship curriculum, and formed four sets of modular textbooks, including comprehensive basic textbooks, industrial textbooks, business development textbooks and distance education textbooks. The setting of innovation and entrepreneurship courses in Chinese universities is marginalized. Many universities' innovation and
entrepreneurship courses are attached to the disciplines of technical economics or enterprise management. Some colleges and universities set them as public basic courses or elective courses, and some universities only pass lectures, competitions, etc. Forms allow students to understand the knowledge of innovation and entrepreneurship and to develop their innovative entrepreneurial skills. Without a systematic curriculum, the educational effect is not good, which brings great limitations to the popularization and development of innovative entrepreneurship courses.

**About Curriculum Design**

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**Teacher Comparison**

The teachers of American innovation and entrepreneurship education are at the world-class level. They are taught by professional teachers and part-time teachers. Professional teachers generally receive doctoral degrees in entrepreneurship or special training. Part-time teachers are generally successful entrepreneurs, entrepreneurs or Successful alumni. For example, the Foster School of Business at the University of Washington has opened more than 40 innovative entrepreneurship courses. Half of its instructors come from business schools, and the other half are from MBA graduates. Most of them are entrepreneurs or executives around Washington State and Seattle, and are very popular with students. The primary limiting factor for the development of China's innovation and entrepreneurship education is the shortage of teachers. Many colleges and universities' innovative and entrepreneurial curriculum teachers are served by grade counselors or other professional teachers. Most of these teachers are directly employed after a short period of training. Most of them lack practical experience and theoretical knowledge is not enough. It is difficult for students to understand the meaning of innovation and entrepreneurship. Although some colleges and universities have hired some successful entrepreneurs and entrepreneurs in the society to teach part-time innovation and entrepreneurship courses, but because of the limitations of money, organization and some part-time teachers lack of teaching experience, the effect is often not very good.

**Differences in Assessment System**

Innovative entrepreneurship education in American universities mainly evaluates courses, teacher generation, academic achievements, influence on society, and achievements of
graduate alumni. This evaluation system is comprehensive and fair, and can stimulate students' enthusiasm for innovation and entrepreneurship and entrepreneurial interest. However, due to the influence of teachers and innovation and entrepreneurship, China's assessment and evaluation mechanism is not perfect. For example, most colleges and universities' innovation and entrepreneurship courses are mainly evaluated in the form of roll-up examinations or group competition results, and some are not even assessed or perfunctory, far less than other courses.

**Innovation and Entrepreneurship Education Environment**

In the United States, the government has set up the National Venture Fund. There are many innovation and entrepreneurship associations in schools. They often carry out innovation activities and entrepreneurship competitions to create a strong environment for expansion and practice. Good school-enterprise cooperation makes more opportunities for successful entrepreneurs to communicate with students, and the technological achievements of students' research and development can be transformed into enterprises. The German government believes that the government, universities and society should play different roles in innovation and entrepreneurship education. The British government has issued many supporting policies for the development of innovation and entrepreneurship education, including the Higher Education Entrepreneurship Fund, Innovation and Entrepreneurship Scholarship, Prince of England Fund and Phoenix Fund. The history of innovation and entrepreneurship education in China is relatively short, and influenced by the traditional employment concept, most students' employment concept is conservative and lack of risk-taking spirit. They think that innovation and entrepreneurship course is only a career guidance course, and they do not attach importance to it. In recent years, the Chinese government attaches great importance to innovation and entrepreneurship education. On the one hand, it vigorously publicizes it. On the other hand, it has issued many supporting policies, including allocating funds to colleges and universities to establish entrepreneurship bases, science and technology parks, and innovation and entrepreneurship incubation bases. Some colleges and universities have begun to set up innovative entrepreneurship courses for all students and incorporated them into credit management.

**Development Strategy of Innovation and Entrepreneurship Education in Chinese Colleges and Universities**

The Chinese government is vigorously promoting innovation and entrepreneurship in all aspects of propaganda, policy, and capital. The main target is colleges and universities. This is a good phenomenon, but to achieve real results, we need to gradually improve the cultivation mechanism.

Strengthen the initiative for innovation and entrepreneurship education, and not engage in formalism. For example, some colleges and universities only offer an employment guidance course, and there are few classes, taught by people like counselors; some schools arrange several students to participate in skill competitions. These are far from being all about innovation and entrepreneurship education.

Optimize the curriculum system settings. Open innovative and entrepreneurial courses for all students, and establish and improve the corresponding evaluation mechanism. The design of professional courses should not only begin with students' knowledge of professional knowledge, but also let students know the history of professional and technological progress.
Strengthen the construction of the teaching staff. Cultivate “double-type” teachers who have solid basic theoretical knowledge, high professional theoretical teaching level, and strong professional guidance ability.

Employ people with successful experience in innovation and entrepreneurship as part-time teachers. Invite successful entrepreneurs or alumni to teach the experience and knowledge of innovation and entrepreneurship in Universities.

Strengthen the practical training of innovative entrepreneurship courses. Colleges and universities should make full use of the practical platforms such as science parks, entrepreneurial parks, and university students' innovation and entrepreneurship incubation bases to strengthen the practice of students' practice and ability, and establish a reasonable assessment method.

References

[1] Strategic Thinking on Promoting the Development of Vocational Education in National Vocational College Skills Competition[J]. Jin Runcheng. Educational Research. 2011(09)

[2] How to Train Students' Innovative and Entrepreneurial Ability in Higher Vocational Colleges[J]. Du Chao. Modern Vocational Education. 2018(29)

[3] Analysis of the Cultivation of "Artisan Spirit" and the Reform of Higher Vocational Education[J]. Tang Li. Curriculum Education Research. 2018(02)

[4] It’s Important for An Enterprise to Benefit while It Cooperates with A Vocational College. Kai-hua Guo. 2017 International Conference on Advanced Education and Management Science (AEMS 2017).

[5] Study on Problems and Strategies of Innovation and Entrepreneurship Education in Colleges [A]. Zhengyu Fan. Proceedings of 2017 2nd International Conference on Education & Education Research (EDUER 2017) [C]