

# The Practice of Innovation and Entrepreneurship Education and Talent Cultivation from the Perspective of "Teacher and Student Co-creation"

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**Abstract:** The innovation and entrepreneurship education with students as the main body and teachers as the object can exert the greatest educational value under the joint assistance of the two. However, the practical characteristics of innovation and entrepreneurship activities themselves have made them an obstacle to the slow development of innovation and entrepreneurship education. Many colleges and universities do not yet have the conditions to establish a practice base for innovation and entrepreneurship education. Therefore, it is not only necessary to improve the education and teaching system for teachers and students, but also to establish a bridge of cooperation between universities, enterprises, and the government to establish a real entrepreneurship practice base for college students, cultivate innovative talents, and ensure social and economic value Production.

**Keywords:** Innovation and Entrepreneurship Education, Talent Training, Practice Base, Education and Teaching System

## 1. Introduction

Nowadays, the wave of mass entrepreneurship and national innovation has injected new vitality into my country's economic development, and the innovative growth concept has been recognized by all countries. Therefore, whether it is due to the country's policy orientation, the need for sustainable social and economic development, or the inherent requirements of the reform and development of universities themselves, they should vigorously develop innovation and entrepreneurship education in universities, and build scientific, adaptable, and capable innovative and entrepreneurial education talent training model that supports the life-long development of students is committed to cultivating innovative talents to promote rapid economic growth and diversified operations in my country.

Many scholars at home and abroad have conducted in-depth research on innovation and entrepreneurship education and talent training under the perspective of "teacher and student co-creation", and have achieved certain research results. For example, a scholar comprehensively analyzed the training models of innovative and entrepreneurial talents in some universities and found that to establish a perfect talent training system, it is not only necessary to optimize the faculty and improve the teaching level of teachers at the teacher level, but also to stimulate their creative motivation from the student level. Innovation and entrepreneurship education should take students as the main body, create a relaxed and pleasant learning atmosphere for students, and provide an entrepreneurial exchange and cooperation platform [1]. By analyzing the development process of innovation and entrepreneurship education, a scholar explained the development of innovation and entrepreneurship education around the world from a horizontal perspective, and put forward constructive suggestions for the cultivation of innovative talents. For talent training programs, education departments should pay attention to innovation and entrepreneurship. Education, the government level should improve the relevant policies to support innovation and entrepreneurship, and the social level should allow enterprises to strengthen cooperation with schools [2]. Although the research on innovation and entrepreneurship education and talent training has become a topic of concern in the education field, there is still a serious shortage of innovative talents in our country. Therefore, the country, society, and schools need to jointly support innovative talent training programs.

This article expounds the concept of innovation and entrepreneurship education, separately introduces the characteristics of innovative and entrepreneurial talents, and then proposes relevant suggestions for cultivating innovative and entrepreneurial talents based on the principles of talent training, and then analyzes the innovation and entrepreneurship curriculum system construction of a university in recent years. The situation and students' satisfaction with the training of talents in the school, through the analysis results, we understand that the school has yet to improve in the cultivation of innovative and entrepreneurial talents.

**2. Theories Related to Innovation Entrepreneurship and Talent Training**

**2.1 Innovation and Entrepreneurship Talents and Education**

(1) Innovative talents

Innovative talents refer to those who have the spirit of innovation and must have strong innovation capabilities. Such talents usually show flexible, open, and curious personality traits, and have unique thinking and creative abilities about things. Entrepreneurial talents refer to people who have a keen business awareness and an accurate grasp of business opportunities, have a strong sense of entrepreneurship, dare to take risks and can take risks. People with this personality will invest funds, knowledge and other related skills or resources, to develop products that can attract consumers, provide economic services, create spiritual and material wealth for themselves, so as to realize their own social value. Innovative and entrepreneurial talents integrate the characteristics of innovative and entrepreneurial talents, and can contribute to economic growth and social progress through cooperative entrepreneurship [3-4].

(2) Innovation and entrepreneurship education

Innovation and entrepreneurship education has now been launched all over the world. Innovation and entrepreneurship education is a new type of training and talent education. In order to meet the needs of social development and cultivate talents with creative ability to increase economic growth, the key is to cultivate professionalism and creativity ability [5]. Innovation and entrepreneurship education is different from vocational training aimed at solving social survival problems, nor is it a crash education for entrepreneurs. The development of innovation and entrepreneurship education should have a long-term vision and lay the "genetic code" for innovation and entrepreneurship for future generations.

(3) Cultivation model of innovative and entrepreneurial talents

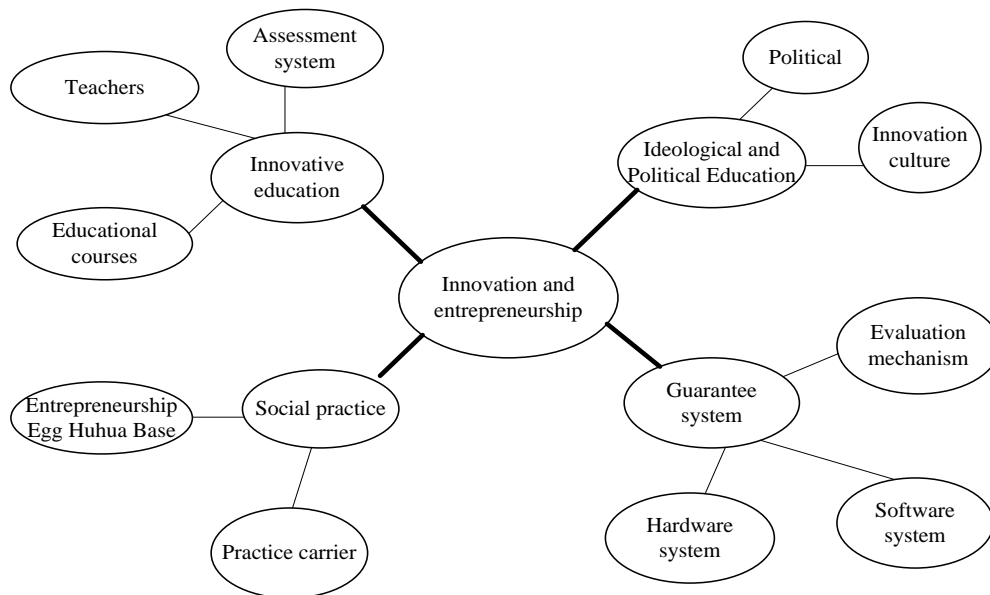


Figure 1: Innovative and entrepreneurial talent training model

As shown in Figure 1, the cultivation of innovative and entrepreneurial talents mainly starts from four aspects. One is innovative education, including teacher structure, assessment system, and

education curriculum; the second is ideological and political education, including ideological and political education and the expansion of innovative culture; the third is social practice, including the construction of entrepreneurial incubation bases and practice carriers; the fourth is the innovation and entrepreneurship guarantee system, including evaluation mechanisms, software systems and hardware systems.

## ***2.2 Principles of Cultivating Entrepreneurial Talents***

First, put people first. No matter what kind of training model is designed and what kind of education method is adopted, its fundamental goal is to "educate people." People are the starting point of education and the end of education. Therefore, innovation and entrepreneurship education should follow the principles of caring for students' lives, respecting students' subjectivity, developing students' diverse personalities, and enhancing students' overall awareness of sustainable development.

Second, innovation and entrepreneurship education is a multi-dimensional and three-dimensional educational process, which must be completed step by step based on a systematic, continuous and comprehensive training model for innovative and entrepreneurial talents. The integration of innovation and entrepreneurship education in the process of talent training can improve the system level of innovation and entrepreneurship education in universities and improve the quality of global education. Innovation for all is an educational philosophy and belief, which must be practiced from time to time [6].

Third, classroom teaching and practical activities complement each other. For higher education, classroom teaching and practical activities are the two main ways to cultivate innovation and entrepreneurship. Practical activities should be based on educational theoretical knowledge, and students should also achieve the goals of tempering their will, accumulating experience, exercising abilities, and cultivating quality through multiple levels and rich forms of practical activities. The quality of innovation and entrepreneurship must be cultivated in the practice of innovation and entrepreneurship based on solid professional knowledge [7].

## ***2.3 Countermeasures and Suggestions for Cultivating Innovative and Entrepreneurial Talents***

### **(1) Improve the teacher admission system**

In addition to the establishment of curriculum systems, the development and promotion of entrepreneurship education in colleges and universities requires a large number of professional teachers to achieve teaching goals. Similarly, teachers play a huge role in exploring teaching methods and imparting teaching processes. Teachers who undertake entrepreneurship education should have the dual qualities of entrepreneurs and scholars, and play the dual roles of teachers and entrepreneurial mentors. In most colleges and universities in our country, teachers who can well assume this dual role are rare. Therefore, perfecting the teacher admission system will naturally become an important problem facing the development of entrepreneurship education in colleges and universities. Universities need to formulate relevant policies to attract talents with strong core knowledge, creative thinking, original and practical research results to colleges and universities. High-quality talents with successful business experience can promote innovation and entrepreneurial vitality [8].

### **(2) Strengthen the construction of teachers for entrepreneurship education in colleges and universities**

Entrepreneurship education requires teachers to combine theory and practice to give college students more guidance. In many cases, practice is often more practical than theoretical knowledge. This requires teachers to have enough entrepreneurial practical experience to transfer to students. On the one hand, colleges and universities can by hiring entrepreneurs or entrepreneurial mentors with many years of entrepreneurial experience in the society to become part-time professors of the school, this can cooperate with the teaching of professional teachers in colleges and universities, and make up for the lack of practical experience of college teachers. At the same time, this is also a good way for teachers to exchange and learn. Opportunities to optimize the faculty structure of universities. On the other hand, encourage more teachers to study entrepreneurship education theories, and take entrepreneurship education as one of their main research directions and lecture courses. At the same time, colleges and universities can also turn their perspective to overseas returnees and include them in the faculty of college entrepreneurship education, so as to continuously expand and optimize the construction of the faculty [9-10].

(3) Establish an entrepreneurial education practice base to provide college students with a place to practice

Entrepreneurship activity itself is a comprehensive activity with very strong practicality, which requires a combination of theory and practice. The importance of improving the quality of entrepreneurship for college students also depends on entrepreneurial practice. Therefore, if the entrepreneurial education of colleges and universities is to be truly implemented, it must provide college students with a good practice place. Colleges and universities are the source of knowledge and high-tech production. Themselves have many rich resources and excellent talent teams, which provide superior conditions for the development of new technologies. Colleges and universities can cooperate with some high-tech enterprises to establish practical places such as science and technology development business parks through their own advantageous resources. Colleges and universities with conditions can also set up entrepreneurship education incubation bases, equipped with multiple mentors with rich entrepreneurial experience to lead students to carry out some business projects. The investment guides students how to establish and operate enterprises, and engage in a series of business activities, technological inventions and services. In the entrepreneurial practice activities, college students can deeply experience the fun and hardships of the entrepreneurial process, and accumulate a wealth of practical experience for subsequent actual entrepreneurial activities [11-12].

#### **2.4 Scoring Feature Extraction**

Each user will have their own preferences and habits, and each person's scoring standards are different. This article is to extract the scoring features of students' satisfaction with the innovative and entrepreneurial talent training model.

$$G = \frac{\sum_{k=1}^n ru(k)}{n} \quad (1)$$

$$P = \{p_1, p_2, \dots, p_n\} \quad (2)$$

Among them, G is a new feature, P represents the set of items evaluated by user u, n is the total number of items evaluated by the user, ru(k) represents the user's rating on item k, and  $k \in P$ .

### **3. Research on the Practice of Innovation and Entrepreneurship Education and Talent Training from the Perspective of "Teachers and Students Co-Creation"**

#### **3.1 Research Purpose**

The main purpose of this article is to put forward some suggestions for the training mode of innovative and entrepreneurial talents in colleges and universities, so as to better exert the talent training function of colleges and universities, and reserve innovative talents for social and economic development.

#### **3.2 Research Methods**

Grading method: This article takes a university's innovative and entrepreneurial talent training model as the research object, and investigates the satisfaction of the school's pedagogy, economics, agronomy, medicine, and engineering students with the school's innovative talent training methods, and scores it, calculate the average score result, set 0-5 as unsatisfactory, 6-10 as average satisfaction, and 10-15 as satisfactory.

### **4. Analysis on the Practice of Cultivating Innovative and Entrepreneurial Talents**

#### **4.1 Current Status of Innovation and Entrepreneurship Courses**

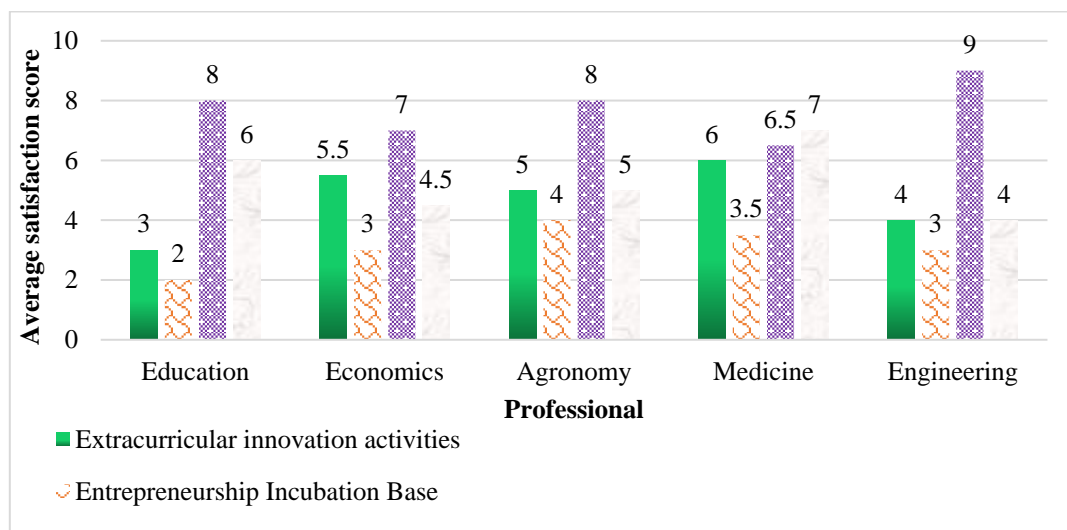
As shown in Table 1 is the opening situation of innovation and entrepreneurship quality courses in a university from 2015 to 2019. The university's national quality courses, provincial quality courses and school-level quality courses are all increasing year by year, but as the number of courses offered increases, the investment in the construction of innovation and entrepreneurship courses has not

increased significantly. With insufficient funding, schools cannot provide students with more advanced teaching equipment, nor can they organize more innovation and entrepreneurship education activities. To cultivate innovative and entrepreneurial talents, it is necessary to increase educational capital investment and create an entrepreneurial environment with practical places for students.

*Table 1: Number of Innovation and Entrepreneurship Courses (Courses) and Their Investment Funds (Ten Thousand Yuan)*

	National Excellent Course		Provincial quality courses		School-level quality courses	
	Quantity	Investment	Quantity	Investment	Quantity	Investment
2015	2	14.5	12	27.6	16	18.7
2016	3	17.2	18	24.3	23	15.5
2017	3	10.8	26	28.2	30	20.1
2018	5	13	31	34.8	35	23.4
2019	7	21	39	30.3	38	23.6

#### 4.2 The Satisfaction of Students of Various Majors with the School's Innovative and Entrepreneurial Talent Training Model



*Figure 2: Satisfaction score results of innovative and entrepreneurial talent training*

Figure 2 shows the satisfaction survey of the school's innovative and entrepreneurial talent training model for some majors of the school. From the perspective of the school's extracurricular innovation activities, medical students have the highest satisfaction scores; from the perspective of entrepreneurship In terms of the construction of the incubator base, the students with the highest satisfaction scores are students majoring in agronomy; from the perspective of the holding of innovation lectures, the students majoring in engineering are the students with the highest satisfaction scores; from the perspective of the improvement of the innovation and entrepreneurship guarantee system, satisfaction the highest scoring is the medical profession. According to the overall scores, the satisfaction scores of all majors for the innovation lectures held by the school are between 6-10 points, which has reached the average level of satisfaction, while the satisfaction of other modules is basically within 5 points, and there is no score. A score of more than 10 indicates that the students of the school are not satisfied with the school's innovative and entrepreneurial talent training model. No talent training module has been recognized by the students. Only holding lectures, such as theoretical innovation education, cannot fundamentally promote innovation. Talent training should provide students with more innovative and entrepreneurial practice activities, and improve students' innovative ability through practice. In general, the school should thoroughly revise its innovative and entrepreneurial talent training model, improve the talent training system, and carry out more related innovative and entrepreneurial activities.

## 5. Conclusion

This article first analyzes the funding for the construction of innovation and entrepreneurship courses in a university, according to the establishment and investment funds of national, provincial and

school-level innovation and entrepreneurship quality courses, it can be concluded that although the number of innovation and entrepreneurship courses has increased in recent years, it is necessary to strengthen financial support. Starting from the four aspects of extracurricular innovation activities, construction of entrepreneurial incubation bases, holding of innovation lectures, and improvement of the innovation and entrepreneurship guarantee system, the analysis of the school's students' satisfaction with the school's innovative and entrepreneurial talent training model is drawn, and the school's innovative talent training the model should be improved. This article also puts forward suggestions for the cultivation of innovative talents, hoping to improve the help for the talent cultivation plan of colleges and universities.

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