

# Research and Practice on Cultivating College Students' Innovative and Entrepreneurial Ability under the Guidance of Craftsman Spirit

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**Abstract:** The "craftsmanship spirit" has received widespread attention. At present, the cultivation of innovative qualities has also been influenced and nurtured by the spirit of craftsmanship. It not only requires college students to proficiently master the basic knowledge of their major, but also to master the necessary practical skills, and on this basis, to optimize their own innovation ability and flexibly respond to more difficulties and risks. The process of entrepreneurship is actually a process of continuous learning and trial and error. Only students with continuous learning ability can achieve a level of excellence and achieve the spirit of entrepreneurship as a craftsman. Through the words and deeds of entrepreneurial mentors, students can understand the methods of craftsmanship spirit. At the level of goals and content, it is necessary to focus on the key literacy of students in entrepreneurship and innovation, and construct a large system for cultivating "craftsman talents" in universities. Through the guidance and guidance of mentors, students' innovation awareness and entrepreneurial ability can be comprehensively cultivated.

## 1. Introduction

The demand for talent in the market is constantly changing. Therefore, higher vocational and technical colleges must continuously reform their educational concepts and methods based on market needs and talent cultivation goals. Universities are the main body of "innovation and entrepreneurship" in universities, providing "innovation and entrepreneurship" education to university students, and providing effective "support" and "cultivation" for them[1]. The spirit of craftsmanship has been highly regarded in recent years. In the teaching process, it is important to cultivate students' "craftsmanship spirit", which is greatly helps to enhance the innovation abilities of vocational college students. The spirit of craftsmanship "refers to the pursuit of perfection, characterized by rigor, patience, focus, persistence, and dedication[2]. In today's society, many companies and individuals only focus on the present and are not prepared for long-term development. The spirit of "craftsman" holds a crucial position in innovation. Universities should regain the spirit of craftsmanship, which is a new era topic[3]. At the same time, universities regard research ability as an important indicator of teacher performance, which makes teachers in universities focus more on their professional courses and neglect the cultivation of entrepreneurial spirit. Entrepreneurship education in universities is basically a fragmented model. Furthermore, there is no problem with the knowledge and abilities of university teachers, but most of them lack entrepreneurial experience and experience, leading to a disconnect between teaching in many universities and the practice of enterprises. At present, local higher education institutions in China are facing an important moment of transformation and development, and the higher education teaching reform aimed at cultivating applied and innovative talents is aimed at this goal. The spirit of craftsmanship refers to the meticulous production and unremitting pursuit of craftsmen in the process of manufacturing products, continuously mastering the cutting-edge scientific and technological knowledge[4]. In the context of creating new achievements, realizing the "Chinese Dream" and the great rejuvenation of the Chinese nation, universities must integrate them with the "craftsman" style, in order to provide a solid guarantee for China's innovative development.

## **2. Cultivation of Entrepreneurship Ability for College Students**

### **2.1. Innovation and Entrepreneurship Concept**

National relevant documents have repeatedly mentioned the need to promote the spirit of craftsmanship in the new era, in order to achieve a comprehensive transformation from a manufacturing power to a smart manufacturing power in complex international competition[5]. It is of great significance to correctly understand and vigorously promote the spirit of craftsmanship, and to build an innovative and highly skilled army of craftsmen for the country, in order to achieve the upgrading and transformation of intelligent manufacturing. Lack of entrepreneurial and practical experience is currently a common problem among entrepreneurial education teachers in universities. The limited teaching resources and teaching staff seriously hinder the progress of entrepreneurial education, and college students do not have effective, systematic, and sustainable entrepreneurial knowledge learning[6]. They also do not have the opportunity and conditions to put entrepreneurial plans into practice. The research on the entrepreneurial ability of college students based on the spirit of craftsmanship needs to combine relevant theories of entrepreneurial education, starting from the antecedent variables such as curriculum teaching and practical training of entrepreneurial education, explore the pathways of the various modules of entrepreneurial education on entrepreneurial ability, and use entrepreneurial performance to actually test the effectiveness of entrepreneurial ability cultivation [7]. The spirit of craftsmanship in any era will inevitably take the progress of the times as its ultimate goal. On the basis of the old industry, our ancestors continuously improved and achieved progress time and time again. The fundamental purpose is to keep the social infrastructure up with the pace of economic development of the times. Similarly, in vocational education, through reasonable guidance and education for students, we enable them to deeply understand the meaning of specialization and achieve the spirit of focusing on everything, especially in learning[8].

### **2.2. Entrepreneurship ability cultivation**

The core value of craftsman spirit is concentration, diligence and happiness. It embodies a kind of professional spirit, which is the practitioners' awe and love for the profession, the Excellence of every product and every process, the patience for details and the persistent focus. These qualities can cultivate students' good ideological and moral literacy [9]. Every college student is a different individual, with different personalities and abilities. Many colleges and universities have no specific training methods for college students, so teachers can't fully tap students' potential and give corresponding guidance, and can't meet the diverse needs of different college students for entrepreneurship education. As far as the current situation is concerned, the cultivation of innovative quality has also been influenced and edified by the craftsman spirit, which requires not only college students to master the basic knowledge of this major, but also to master the necessary practical skills, and on this basis, to optimize their own innovative ability and flexibly cope with more difficulties and risks [10]. At the same time, it emphasizes the independent consciousness and independence of college students, aiming at enabling them to master the ability of self-analysis and self-improvement. Under the guidance of craftsman spirit, universities integrate entrepreneurial content with craftsman spirit, strengthen personalized production and flexible production in university curriculum, and enable students to master lean manufacturing and other methods; Through practical operation and simulation training, quality improvement and service improvement are integrated into students' entrepreneurial consciousness, so that students can feel the craftsman spirit in entrepreneurial practice [11]. The cultivation of craftsman spirit can effectively guide students to establish a good professional concept, so that students can have excellent qualities such as dedication, perseverance and perseverance, and have an optimistic attitude of facing difficulties and never giving up when starting a business, thus continuously improving students' innovation and entrepreneurial ability [12].

### 3. Cultivating the Entrepreneurship Ability of College Students Guided by the "Craftsman Spirit"

#### 3.1. Constructing a new talent cultivation model

Taking the "industry education system" as the foundation, the "project system" as the carrier, and the "mentor system" as the focus, a comprehensive "three system" innovative talent training model is constructed, as shown in Figure 1.

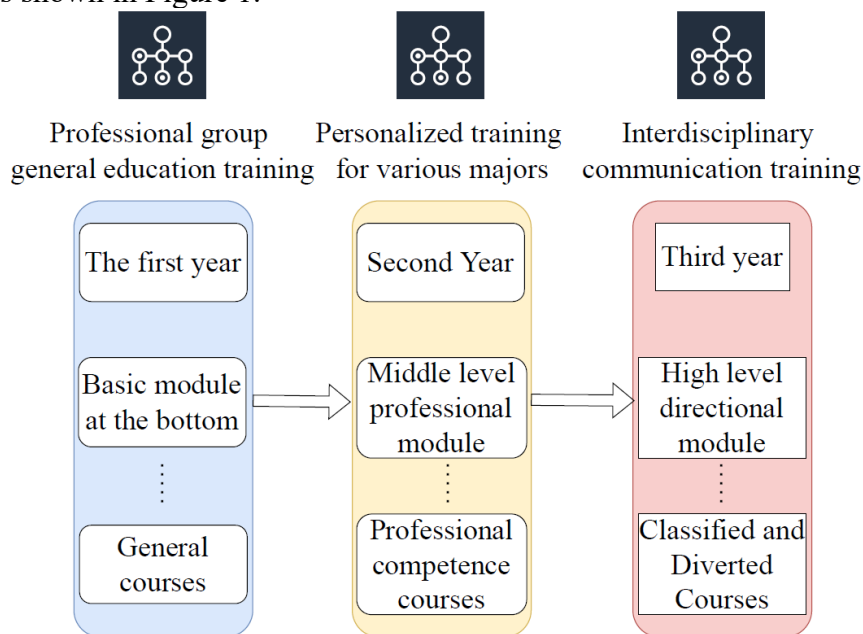


Figure 1 "Three Systems" Innovative Talent Training Model

Relying on the engineering application technology center and joint-stock studio jointly built by schools and enterprises, and using actual engineering projects as carriers, we jointly develop the curriculum system and supporting textbooks for innovative talent cultivation. The content of cultivating entrepreneurial engagement requires specialized research and discussion. Universities can offer special topics in their curriculum to explain the cultivation of professional dedication and cultivate students' habit of striving for excellence; Through entrepreneurship training, students can truly feel a sense of investment and dedication in entrepreneurship, and understand the hardships of the entrepreneurial process; Through the words and deeds of entrepreneurial mentors, students can understand the methods of craftsmanship spirit. At the level of goals and content, it is necessary to focus on the key qualities of students' entrepreneurship and innovation, such as resilience, pioneering consciousness, innovative concepts, collaborative ability, etc., in order to guide the formation of adaptability in curriculum construction, curriculum education, practical education, and other aspects, and construct a large system for cultivating "craftsman talents" in universities. Through the guidance and guidance of mentors, students' innovation awareness and entrepreneurial ability can be comprehensively cultivated.

#### 3.2. Building an Entrepreneurship Teaching Platform

Practical teaching is an important link in enhancing entrepreneurial ability. The purpose of constructing a garden entrepreneurship practical teaching platform is to provide students with more entrepreneurial training and exercises, and actively explore educational channels and methods to enhance students' entrepreneurial ability. This article constructs a "four in one" innovation and entrepreneurship teaching platform, as shown in Figure 2.

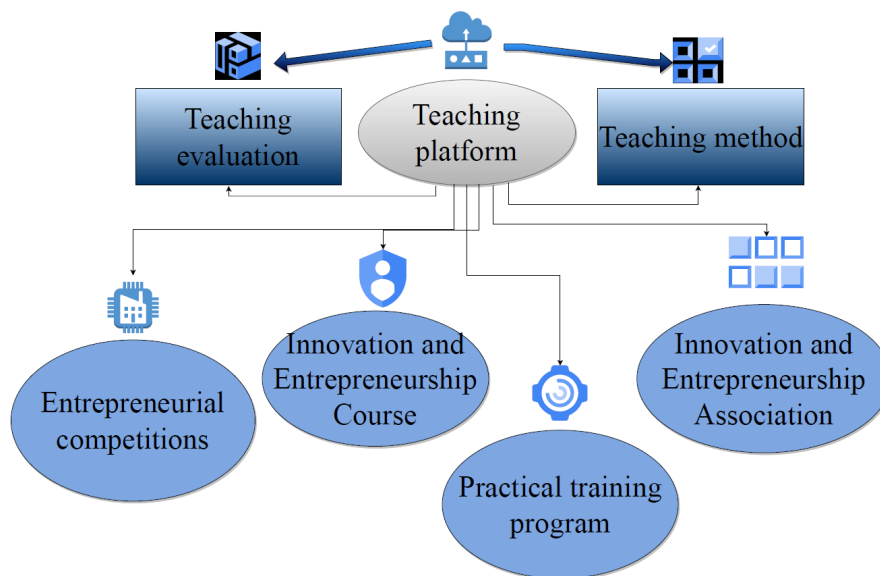


Figure 2 "Four in One" Innovation and Entrepreneurship Teaching Platform

It is essential to cultivate higher vocational students' innovative consciousness, social responsibility, innovative spirit, practical ability and entrepreneurial consciousness, and focuses on reforming talent training mode, curriculum system, teaching content, teaching methods and teaching evaluation, so as to build a "four-in-one" innovative and entrepreneurial teaching platform of innovative and entrepreneurial courses, practical training projects, associations and competitions. After mastering the initial skills, students will continue to learn and feedback according to the actual entrepreneurial environment, entrepreneurial projects and entrepreneurial dilemmas in their subsequent entrepreneurial activities. The process of starting a business is actually a process of continuous learning and trial and error. Only when students have continuous learning ability can they achieve perfection and realize the craftsman spirit of starting a business. Relying on the curriculum education in the first classroom and the second classroom, practical education focuses on practical training projects, associations and competitions, and creates a "double-qualified" team with craftsman spirit through multiple channels.

### 3.3. Create a collection of "creative cultivation innovation practice entrepreneurship incubation"

Guide students to participate in innovation, encourage personalized development, and ensure that 100% of students receive innovation education; Encourage students to engage in brainstorming and creative collision, establish an "Innovation Forum" based on the Yizhi Education Cloud Platform, establish "Entrepreneurial Creativity Class", "Luban Workshop Creativity Class", and "Life Mechanics Creativity Fun Class", and create an innovation ability improvement platform. To start with improving the quality of the teaching staff, we should first strengthen education and training on the entrepreneurial qualities of the existing teaching staff. In response to the current situation of the lack of entrepreneurial awareness and ability among professional teachers in landscape vocational colleges, vocational colleges should adopt a reasonable and batch training plan to improve the entrepreneurial ability of professional teachers, and adopt a "old leads new" mentor team system. In the process of entrepreneurship education, the spirit of craftsmanship needs to be embedded in innovative abilities, guiding students to understand and master fine skills, exquisite services, lasting investment, and sincere dedication. The cultivation of these abilities requires not only explanation in curriculum teaching, but also training in entrepreneurial practice activities to continuously improve and enrich the high-level innovation support system. At the same time, attention is paid to universal and basic innovation services, and the potential for innovation of young students is deeply explored, Focusing on the color, industrialization, standardization, informatization, and intelligence of modern construction industry.

#### 4. Conclusions

Entrepreneurship requires motivation and innovation is the core, which is an important national strategy to cultivate comprehensive innovation abilities for college students. In the current vocational and technical colleges, the most effective way to solve this problem is to integrate the "craftsman spirit" into the vocational and technical colleges of vocational and technical colleges. The cultivation of entrepreneurship abilities among college students is a very difficult process. Therefore, how to improve the entrepreneurship abilities of college students is an important issue facing talent cultivation in current universities. Therefore, this paper explores the cultivation of entrepreneurship abilities among college students guided by the spirit of craftsmanship. Encourage teachers to participate in entrepreneurship and innovation research, plan the learning cycle, and stratify its content, in order to achieve full coverage and efficiency of a good training mechanism, and continuously optimize the level of new entrepreneurship among college students. Make full use of the good platform provided by society, adjust one's mental state, dare to innovate, dare to explore, be proactive, exercise oneself in practical work, improve one's professional knowledge and technology, and become an entrepreneur who grows up in a new environment. Continuously optimize the teaching evaluation mechanism, strengthen practical teaching, guide the growth of teachers, and make them better versatile talents.

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