

# A Practical Study on the Integration of Innovation and Entrepreneurship Education and Professional Education in Higher Vocational Colleges

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**Abstract:** Innovation and entrepreneurship education is an important carrier to stimulate higher vocational students' innovative spirit, and entrepreneurial enthusiasm and enhance vocational students' professional quality and professional spirit. This paper analyzes the problems and challenges of the integration of innovation and entrepreneurship education and professional education in higher vocational colleges from three aspects: value connotation, innovation and entrepreneurship education system and practical teaching base. Based on the current innovation and entrepreneurship education reform practice in some higher vocational colleges, this paper puts forward the practical path of the integration of innovation and entrepreneurship education and professional education in higher vocational colleges, which provides a reference for the innovation and entrepreneurship education reform in higher vocational colleges.

**Keywords:** Higher vocational colleges; Innovation and entrepreneurship; Professional education; Integration; Practice path

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## 1. Introduction

Vocational colleges and universities are the main places to train high-quality technical and skilled personnel. However, with the acceleration of the new round of scientific and technological revolution and industrial change, the new technical positions are more in need of compound talents who not only understand professional knowledge but also have the spirit of innovation and entrepreneurial skills <sup>[1]</sup>. Therefore, the development of innovation and entrepreneurship education is not independent and has its own system <sup>[2]</sup>, to realize the organic integration with professional education, while establishing a composite talent training mechanism, in order to obtain the best education effect <sup>[3]</sup>.

## **2. The practical significance of the integration of innovation and entrepreneurship education and professional education**

For higher vocational colleges, innovation and entrepreneurship education is not simply to encourage students to set up enterprises by themselves, but to deepen students' quality education and cultivate high-quality innovative and entrepreneurial composite talents <sup>[4]</sup>. The integration of innovation and entrepreneurship education and professional education in higher vocational colleges is an important starting point for cultivating students' sense of responsibility and innovative spirit, as well as promoting their high-quality employment and entrepreneurship. In the current context of self-reliance and innovation-driven development in science and technology, there is a need for more innovative artisans in major countries. In this context, it is more important to enhance the innovative spirit, entrepreneurial awareness and innovative entrepreneurial ability of higher vocational students. At present, the innovation and entrepreneurship education in higher vocational colleges in the country has realized the transformation from the function-oriented mode of solving the single employment problem to the cultivation of innovative talents. There are still many problems, which affect the effectiveness of innovation and entrepreneurship education <sup>[5]</sup>.

## **3. Problems and challenges in the integration of innovation and entrepreneurship education and professional education in higher vocational colleges**

### **3.1. The construction of value connotation of innovation and entrepreneurship education is insufficient**

Innovation and entrepreneurship education is not closely combined with professional personnel training and fails to guide students to establish a correct concept of innovation and entrepreneurship. At present, mass entrepreneurship education in higher vocational colleges focuses too much on the results of students' entrepreneurial behavior, ignoring the cultivation of students' overall innovative thinking. At present, in the field of vocational education, some professional teachers do not have a deep understanding of the connotation of entrepreneurship education, believing that entrepreneurship education in colleges and universities is to support students to open stores and run companies at school or after graduation, and the original intention of vocational education to train technical and skilled talents is put before the horse, and professional education and innovation and entrepreneurship education lack the guiding concept and scientific design of organic integration. This lack of continuous optimization and effective internalization of innovation and entrepreneurship education results in a closed-loop mechanism.

### **3.2. The innovation and entrepreneurship education system in higher vocational colleges is fragmented**

The structure of the teaching staff is unbalanced, and the mass entrepreneurship education is generally not deeply integrated with majors. At present, the phenomenon of "two skins" between professional education and mass entrepreneurship education is prominent, which fails to implant innovative "genes" into the whole process of talent training, and it is difficult to stimulate students' innovative thinking and entrepreneurial consciousness. At present, vocational colleges are very short of professional innovation and entrepreneurship education teachers, and the proportion of vocational teachers in innovation and entrepreneurship education teachers is too low <sup>[6]</sup>. Most of them are supplemented by career guidance teachers, whose composition is mainly student staff. The subject background of these teachers is complex, they are not enthusiastic about

the construction of specialized and integrated curriculum, they cannot effectively tap the potential innovation and entrepreneurship teaching resources of the curriculum, they lack curriculum construction experience and excellent cases, and they lack the teaching content and methods that keep pace with the era.

### **3.3. The number of practice teaching bases of innovation and entrepreneurship education in higher vocational colleges is insufficient**

The practical teaching system is not perfect, and the integration of practical teaching and theoretical teaching is low. At present, although the higher vocational schools speed up the construction of science and innovation integration and entrepreneurship incubation platforms, the practice system is still not perfect. It is difficult for students to participate in entrepreneurial practice in the teaching process, and the teaching process is often carried out in the form of “lecture” and “visit,” which is difficult to achieve the effect of combining theory with practice, resulting in the current innovation and entrepreneurship education practice training is not targeted enough, and the training effect is not good.

## **4. Practice path of integration of innovation and entrepreneurship education and professional education in higher vocational colleges**

### **4.1. Establish the value concept of innovation and entrepreneurship education for post-entrepreneurship**

The new concept of job-oriented innovation and entrepreneurship education is an educational concept full of forward-looking and practical value, which regards entrepreneurship and employment as a compatible way out <sup>[7-9]</sup>. The core of this concept is to integrate entrepreneurial spirit and innovative thinking into professional education, not only to cultivate college students' ability to start their business but also to improve their innovation ability and entrepreneurial quality in any employment position <sup>[10]</sup>. The idea emphasizes the broad nature of entrepreneurship education, namely entrepreneurship is not only an independent economic activity but also a mindset and way of thinking that can be applied to any job position. The idea advocates an integrated education model, which combines entrepreneurship education with professional education and forms a complete innovation and entrepreneurship education system through the innovation and penetration of entrepreneurship general courses, professional entrepreneurship courses, and the connection of on-the-job entrepreneurship practice teaching. The new concept of post-entrepreneurship-oriented innovation and entrepreneurship education is an educational concept with innovative and practical value, which can effectively promote the reform and development of higher education, improve the comprehensive quality and ability of college students, and is of great significance for training high-quality talents to meet the needs of future social development.

Yangzhou Polytechnic Institute of Industry added the major of live streaming “E-Commerce Management and Operation” in June 2020. In the construction of the major, it has established the specialized innovation and integration education oriented by post-entrepreneurship, based on theoretical education, guaranteed by the participation of enterprises in the whole process, and centered on the cultivation of innovative literacy, and explored the co-innovation mode of “college and enterprise students” in the training of live streaming e-commerce professional technical skills. The teaching process of this major focuses on cultivating students' entrepreneurial spirit and ability, emphasizes the combination of post-practice and classroom teaching, stimulates students' enthusiasm for learning through competitions, and certifies students' learning results with

certificates. In the process of talent training, emphasis is placed on the combination of theory and practice. Students conduct entrepreneurial practice in real or simulated post environment, which improves students' practical ability and innovative thinking. The students participate in the business operation of the enterprise immediately after enrollment, and the enterprise mentor guides the students in the form of "teacher and apprentice," and understands the current situation of the industry and the operation of the enterprise through practical operation, which drives the rapid rise of vocational ability.

On the basis of practical training, students can form a team to contract enterprise projects, discover job entrepreneurship, and exercise project management and team cooperation abilities. On the basis of post-entrepreneurship, students will further incubate and grow and eventually realize partnership entrepreneurship, cultivate to become real entrepreneurs and finally form the complementary advantages of the school, the enterprise, and the students. The training mode of live streaming e-commerce in Yangzhou Polytechnic is a model of active innovation in education and teaching. It has cultivated a group of high-quality professionals for the live streaming e-commerce industry. This job-oriented talent training mode provides valuable experience for other higher vocational colleges <sup>[11]</sup>.

## **4.2. Build a capability-oriented innovation and entrepreneurship education and teaching system**

According to Hemingway's "iceberg theory" <sup>[12]</sup>, innovation and entrepreneurship ability are relatively dominant, while the core qualities supporting mass entrepreneurship and innovation ability are relatively recessive. Professional communication ability, teamwork ability, self-management ability, information processing ability and problem-solving ability form the "iceberg base" of mass entrepreneurship and innovation ability. For higher vocational colleges, in order to cultivate students' innovation and entrepreneurship ability, it is necessary to carry out research on the core qualities of mass innovation and entrepreneurship talents, solve the problems of the isolation of innovation and entrepreneurship curriculum system, the lack of deep integration with majors, and the lack of a systematic overall structure of talent training process to build a "progressive" specialized innovation and integration curriculum system, form a precise supply of educational resources, and meet the individual needs of students.

The Yellow River Water Conservancy Technical College adheres to the student-oriented and connects the training goal chain "from professional talent training goal to curriculum teaching goal to classroom teaching goal," and runs the concept of "mass innovation" through the whole process of education and teaching. It has built a three-step curriculum system of "1 general course → 185 specialized innovation and integration courses → 65 dual-platform-based innovation and innovation practice project courses." Through course learning, students can lay a solid foundation of "innovation and innovation" knowledge and ability <sup>[13]</sup>.

Guangdong Polytechnic of Light Industry has established a "core quality + innovative course + entrepreneurial project" curriculum system integrating school-based cultural elements and has built "quality class," "ability class" and "project class" core curriculum resources for entrepreneurship and innovation, combining online and offline in the way of "compulsory + elective + minor," to accurately supply the course resources for students' needs for entrepreneurship and innovation. At the same time, the university has established an enabling mechanism for transforming scientific research projects into innovative courses, requiring teachers to develop their scientific research projects into innovative courses, and students to propose their research direction through deep learning of the course, form a double innovation project, and carry out double innovation practice <sup>[14]</sup>.

### **4.3. Improve the demand-oriented innovation and entrepreneurship education practice model**

The concept of demand-oriented education has been widely applied to ensure that the education system matches the development needs of society and the economy and that students can meet the development needs of the industry after graduation. At present, vocational education is promoting the deep integration of industry and education, creating a combination of industry and education with the functions of talent training, innovation and entrepreneurship, and promoting the high-quality development of the industrial economy. To build the “medium” of entrepreneurship and innovation through the integration of industry and education, and strive to match the needs of the “industrial chain.” Relying on local industrial parks, key industries and key fields, schools, scientific research institutions, and upstream and downstream enterprises jointly participate in the integration of practical training laboratories, industry-university-research platforms, ideological and political education bases, entrepreneurship and innovation practice bases, industrial colleges, and entrepreneurial project incubation platforms into a mutually nested practice system of innovation and innovation integration to form a demand-oriented innovation and entrepreneurship education practice model.

Chengdu Vocational and Technical College has established a teaching system of innovation and entrepreneurship practice such as “Maker Workshop + Innovation and Entrepreneurship Club + Entrepreneurship Street + Entrepreneurship Community” to ensure that every student has the opportunity to participate in entrepreneurship and entrepreneurship practice. Through the implementation of the platform, advocating the “combination of competition and innovation,” promoting learning through competition and training through competition, so that students can naturally improve the quality and ability of innovation and entrepreneurship in business plan writing, business model refining, project roadshow and other links. Through incubation, students who are willing and prepared to start their businesses can be guided and helped to set up small and micro enterprises by taking advantage of the campus business park. They will be given priority to settle in the campus park, which will not only promote employment but also nurture professional teaching<sup>[15]</sup>.

Zhejiang Vocational and Technical College of Industry and Trade, relying on the integration of “College City,” has established a “one core and multiple points” innovation and entrepreneurship practice teaching platform. Based on the Zhejiang Creative Park independently created and operated, the school adopts the mode of “property rights + market contract,” and the government, school, bank and enterprise build a comprehensive practical support and service integration of “College City” innovation and entrepreneurship education. With the park as the core, the school has introduced more than 50 enterprises, built a national space for mass innovation, formed an “experience + training + incubation” innovation and entrepreneurship practice environment and cultural atmosphere, and stimulated the internal motivation of innovation and entrepreneurship.

## **5. Conclusion**

Given the problems existing in the integration of innovation and entrepreneurship education and professional education in higher vocational colleges, combined with the reform practice of entrepreneurship and education in some domestic higher vocational colleges, this paper puts forward the practice path of the integration of innovation and entrepreneurship education and professional education in higher vocational colleges. At present, the innovation and entrepreneurship education reform in higher vocational colleges needs to establish

the value concept of post-entrepreneurship innovation and entrepreneurship education, build a capability-oriented innovation and entrepreneurship education teaching system, and improve the demand-oriented innovation and entrepreneurship education practice model to cultivate more great country craftsmen with innovative spirit.

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