## Construction and Exploration of "Hierarchical and Progressive" Innovation and Entrepreneurship Education System in Colleges and Universities

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#### **Abstract**

With the ongoing reform of higher education and the development of innovation and entrepreneurship education, innovation and entrepreneurship education are becoming increasingly significant in college students' education. Colleges and universities educate inventive and entrepreneurial talent and support mass entrepreneurship and innovation, which has emerged as a new economic and social growth force. In light of the urgent social demand for innovative and entrepreneurial talent, colleges and universities should optimize and integrate educational resources, as well as actively explore a new innovation and entrepreneurship education system that is in line with university conditions and social realities. From the standpoint of a university curriculum system, this study carries out hierarchical and progressive teaching for various grades, and investigates the implementation and assessment techniques of this education system.

## **Keywords**

University; Innovation and Entrepreneurship; Education System.

## 1. Introduction

The goal of innovation entrepreneurship education is to cultivate entrepreneurial basic qualities and create a type of personality, not only to cultivate students pioneering consciousness, innovation spirit, and innovation ability, but also to be more geared to the needs of the entire society, for those who intend to entrepreneurship, business, and the entrepreneurial venture group, a phased hierarchical creative thinking training and entrepreneurship ability of exercise. The major purpose of innovation and entrepreneurship education is to promote students' inventive spirit, entrepreneurial consciousness, and innovation and entrepreneurship aptitude. Higher education is specialized and vocational education that follows secondary school and is the primary social activity for the development of senior specialized abilities and professional employees. Higher education is an essential component of the educational process. With the rapid expansion of the societal need for senior professionals and the pressing need for individuals to get higher education chances, higher education began to shift from elite to popular education in the second half of the twentieth century. As a result, college students play an essential role in the innovation and entrepreneurship education community.

## 2. Current Status of College Students' Cognition of Innovation and Entrepreneurship

## 2.1. Low Awareness of Innovation and Entrepreneurship and Low Entrepreneurial Intention

At this time, a feeling of innovation and entrepreneurship is very crucial in the development of college students' abilities to innovate and entrepreneur. The outcomes of our analysis, however, are given in Table 1. According to the findings, while the majority of college students want to engage in independent innovation and entrepreneurship, the number of college students who create their own enterprises is very modest, and there are still many college students who have no interest in doing so. As a result, college students' understanding of innovation and entrepreneurship has to be improved.

Table 1. College students' awareness of innovation and entrepreneurship

proportion	situation
76.4%	Consider starting a business
21.1%	No idea about starting a business
2.5%	Starting a business

We issued 161 questionnaires to investigate college students' understanding of entrepreneurial risk, and the results are shown in Table 2. It can be seen from this that most college students think the risk of entrepreneurship is very big, so many college students are not willing to take this risk and invest a lot of time and energy, which also causes some difficulties for college students to form their own sense of innovation and entrepreneurship. At the same time, the survey shows that 73.9% of college students choose direct employment in their future planning, while only 14.9% choose to start their own business. It can be seen that most college students prefer to have a stable job in the future rather than try to start their own business. In other words, college students generally have low entrepreneurial intention at present. According to the analysis of their majors and their entrepreneurial prospects, most college students think that their majors have little entrepreneurial prospects, which can be seen to have a certain relationship with their low entrepreneurial intentions.

**Table 2.** Entrepreneurial risk survey

proportion	view
58.4%	It is relatively risky to start a business
27.3%	Starting a business is very risky
14.3%	The risk of starting a business is average and acceptable

## 2.2. Low Awareness and Recognition of Entrepreneurship Policy

At present, with the continuous growth of the number of entrepreneurs, the awareness of self-entrepreneurship is also deeply rooted in the people. As a new subject of independent entrepreneurship, college students also inject new blood into the platform of entrepreneurship. At the same time, in order to support college students to start their own businesses, the government has also issued relevant policies and regulations to encourage college students to start their own businesses. However, according to the survey results,52.2% of college students hardly take the initiative to understand these policies and regulations, and are in a hazy state,32.3% of them only pay attention to them occasionally, and only a few of them often pay attention to them and are quite clear about these policies and regulations. Table 3 shows the attitudes of the surveyed college students towards the role of entrepreneurship support

policies. From the results of the survey, it can be seen that college students' understanding of innovation and entrepreneurship policies and regulations is quite weak, so their recognition is also very low. This shows that college students do not make good use of the favorable policies provided by the government and miss some opportunities, which makes it more difficult for them to start their own businesses.

**Table 3.** Attitudes of college students towards entrepreneurship support policies

proportion	attitude
12%	no use
49.7%	role in general
32.3%	good

## 2.3. Lack of Professional Theoretical Knowledge and Guidance for Innovation and Entrepreneurship

Many college students lack academic knowledge of innovation and entrepreneurship, as well as a clear understanding of what these terms mean. How can they have the notion of innovation and entrepreneurship without theoretical knowledge? As a consequence, a study is conducted to determine how college students can comprehend theoretical knowledge of innovation and entrepreneurship, with the findings displayed in Table 4. The results show that college students learn about innovation and entrepreneurship theory mostly through the Internet and entrepreneurship courses. However, both of these techniques have drawbacks, as much internet content is unreliable, and entrepreneurial courses are fleeting. Only a tiny percentage of college students get theoretical knowledge through innovation and entrepreneurship courses, demonstrating a dearth of professional theoretical knowledge and supervision among college students.

**Table 4.** Sources of theoretical knowledge of innovation and entrepreneurship

proportion	source
36.02%	Internet
33.54%	lecture
12.42%	relevant courses
6.83%	enter entrepreneurship competitions
11.19%	relevant books

We college students' perceptions of innovative entrepreneurial theory knowledge were investigated, the results as shown in table 5, shows that most college students value innovation entrepreneurship theory knowledge, also reflects the lack of knowledge of its own theory, theory of knowledge supports is difficult to use the relevant knowledge in practice in the future.

**Table 5.** Views on theoretical knowledge of innovation and entrepreneurship

proportion	view
50.3%	comparatively important
31.7%	very important
14.3%	general important
3.7%	unimportance

## 3. Establish a Tiered and Progressive Innovation and Entrepreneurship Education System

According to the cognitive status of college students on innovation and entrepreneurship and referring to the reform and practice of innovation and entrepreneurship education in Colleges and universities, this paper proposes to build a "hierarchical and progressive" innovation and entrepreneurship education system. That is to establish a progressive innovation and entrepreneurship education system for students of different grades and majors on the basis of general education. It is mainly constructed from two aspects: training mode and curriculum system.

#### 3.1. Cultivation Mode

Before training talents, a reasonable training cycle should be set according to the growth rules and training objectives of innovative and entrepreneurial talents. The growth rule of innovative and entrepreneurial talents is to innovate first and then start a business, and the realization of entrepreneurship is based on innovation. Therefore, according to this rule, colleges and universities should cultivate college students' innovation first and then cultivate college students' entrepreneurship according to the training cycle. Innovation and entrepreneurship courses need to run through the whole university teaching cycle. The teaching of innovation courses for freshmen and sophomos is mainly to cultivate college students' innovation ability and teach knowledge about innovation in this period. If students meet the assessment requirements for innovation courses, they can apply for entrepreneurship courses in advance. On the basis of innovation teaching, entrepreneurship courses are taught for students in grade three and four. Teachers formulate and adjust innovative and entrepreneurial talent training programs according to students' learning conditions and needs, including the establishment of courses, topics and seminars, etc., and teach college students according to the programs.

#### 3.2. Curriculum System

The layered construction of general education system, professional education system, practical education system and entrepreneurial service system is described below.

## 3.2.1. General Education System

To carry out education on innovation and entrepreneurship, we must first update our educational philosophy and realize the integration of liberal arts, science and professional education. In the first year of university, a general education system should be implemented for all students. In other words, in addition to offering public basic courses, multiple general innovation and entrepreneurship education courses can be offered, such as Entrepreneurship and Innovation Awareness Education, Career Planning, Foundation of Innovation and Entrepreneurship, Employment and Entrepreneurship Guidance, etc. At the same time, the school should often invite some successful entrepreneurs or outstanding entrepreneurial alumni to carry out "entrepreneurship lecture", "entrepreneurship forum" and other extracurricular activities, and strive to create a strong entrepreneurial atmosphere in the school and stimulate students' entrepreneurial awareness.

### 3.2.2. Professional Education System

Colleges and universities should offer different courses of innovation and entrepreneurship education according to students' different majors, and often organize various innovation and entrepreneurship competitions so as to integrate innovation and entrepreneurship education into professional education. For sophomores, a curriculum system of "specialty + entrepreneurship" is constructed, and corresponding entrepreneurship curriculum system is customized and developed according to the needs of professional talent cultivation. Meanwhile, innovative spirit, entrepreneurship theory and entrepreneurship practice are included in

professional talent cultivation programs and credit system. Through the curriculum system of "major + entrepreneurship", students of different majors are guided to innovate constantly and realize their own entrepreneurship. At the same time, encourage and guide students to actively participate in the learning of entrepreneurial knowledge through organizing various community activities. Universities should also establish a "graded and progressive" innovation and entrepreneurship curriculum system through curriculum reform. At the same time, comprehensive reform of teaching content and methods, organize experts, scholars, entrepreneurs, double-qualified teachers to form a special innovation and entrepreneurship curriculum development committee, formulate unified curriculum standards, jointly develop special textbooks, design effective assessment methods, etc.

## 3.2.3. Practical Education System

In practice, colleges and universities can integrate all kinds of resources inside and outside the campus to create a "campus training company", through the real company operation, to provide students with a real innovation and entrepreneurship practice platform; In addition, students can be encouraged to actively go out to organize internships in enterprises, governments and other companies and units, so as to personally experience the application of innovation and entrepreneurship ability in the workplace. Colleges and universities should actively open up practice sites for students on and off campus, and increase students' innovation and entrepreneurship experience through various modes such as school-government cooperation, industry-education integration, and work-study integration. The teaching system of practical innovation and entrepreneurship should be based on basic ability training, take comprehensive quality training as the core, take innovative spirit education as the main line, and build an integrated practice teaching system of "teaching-learning-doing-innovation".

### 3.2.4. Entrepreneurship Service System

College students' entrepreneurship and innovation is a systematic project. To achieve the success of entrepreneurship, students not only need to have passion, project and entrepreneurship, but also need the support of venture capital, site, policy, service and other aspects. For some "entrepreneurial elites" who have both good entrepreneurial projects and entrepreneurial passion, the university should focus on providing them with support in terms of entrepreneurial places, funding and public relations coordination, so as to help these good entrepreneurial projects to complete the establishment of entity companies as soon as possible. For example, the campus "Entrepreneurship Street" can provide free stores and business sites for college students' entrepreneurship projects, help them raise funds, fight for tax relief, and provide free legal and management consulting. The university should also cooperate with local governments, industries, research institutions and enterprises to create "college students' creative entrepreneurship park" and actively carry out "industry incubation" to further improve students' practical ability of innovation and entrepreneurship. "College Students Creative Pioneer Park" should build a relatively complete service system for entrepreneurship, providing all-round and multi-level services such as office space, property management, industrial and commercial registration, finance and taxation, legal consulting, venture capital, talent recommendation, market development, investment attraction and so on.

# 4. Implementation and Assessment Methods of "Hierarchical and Progressive" Innovation and Entrepreneurship Education System

## 4.1. Implementation Measures

### 4.1.1. Provide Base Space

Many college students have preliminary actions and plans, but they may lack space for business operation at the beginning. The school can provide a space for students to start a business and

encourage them to practice. Practice is also an important way of innovation and entrepreneurship education. The school should inspect the projects entering the space. Not all projects are allowed to enter. Relevant personnel can inspect the projects, and only excellent projects can enter the space.

### 4.1.2. Establish Scholarships

Now countries are advocating innovation business, and for schools or colleges, to set up a scholarship is a very good way to encourage, to excellent results, commercial project appraisal, to give these outstanding students entrepreneurial monetary rewards, so has been in practice innovation entrepreneurship students to get more encouragement, to have more confidence stick to it. At the same time, students are encouraged to participate in municipal and national innovation and entrepreneurship competitions. Not every entrepreneur can succeed. Universities should let everyone know the results of excellent projects at municipal or even national level while practicing. Schools can first select or compete internally and recommend excellent projects or teams to higher level competitions.

## 4.1.3. Hold Lectures or Communication Meetings

Schools should also try to contact some successful entrepreneurs and successful alumni to provide experience. Let the students know what qualities a successful entrepreneur should have, experience exchange can let the students learn from their predecessors, actively cultivate their own lack of quality.

## 4.1.4. Exhibition of Entrepreneurial Achievements

On the one hand, the achievements and progress of innovation and entrepreneurship education can be displayed. It also encourages other would-be entrepreneurs to take the first step with more confidence. The school can hold regular results exhibition, also can let the entrepreneurs explain their own projects, to provide experience and ideas for the students who want to start a business.

### 4.1.5. Organize Commercial Associations

Many colleges and universities have established commercial associations, including project application and project operation, which will involve business planning, fund raising and other project links. In this way, students can feel the operation process of business projects in practice, and students will have a deeper understanding and experience of business.

## 4.2. Assessment Methods

The credit system can be used to assess innovation and entrepreneurship education. Innovation and entrepreneurship credits can be set for different grades requiring different points. According to the different nature of innovation and entrepreneurship credits, they can be divided into scientific and technological innovation credits, humanistic quality credits and vocational skills credits.

- Science and technology innovation credits. It includes professional competitions, innovation and entrepreneurship training programs, scientific research, patents, entrepreneurship training and entrepreneurship practice activities, etc. The achievements and credits obtained are shared by the Committee of Student Department and Youth Department, and evaluated by the Department of Science and Technology, The Department of International Cooperation and Exchange and relevant colleges.
- •Humanities Quality credits. Students who participate in relevant community activities, theoretical and liberal arts competitions, mass (non-professional) cultural and sports activities, and social practice activities organized by the school can obtain liberal arts credits according to the activity process or approved results. Appointed by committees of youth associations, sports and military departments, etc.

•Credits of professional skills. Students participate in the ability tests organized by schools or institutions recognized by the school or participate in various vocational qualifications, vocational training and examinations and other activities, and obtain corresponding grades or certificates, vocational skills points, issued by the student office, youth association.

## 5. Conclusion

College students' innovation and entrepreneurial planning is very significant in this period of fast economic development. Most colleges and universities' innovation and entrepreneurship education systems are currently flawed and need to be addressed. Students are challenged by innovation and entrepreneurship, but they may also enhance their excitement and flexibility. As young people in the new period, we must have the bravery to work hard, be energetic, take risks, seek development in difficulties, and progress in development.

This study proposes to establish a "hierarchical and progressive" innovation and entrepreneurship education system by researching the existing state of college students' cognition about innovation and entrepreneurship and understanding the causes for it. This study investigates and evaluates the "hierarchical and progressive" innovation and entrepreneurship education system's training mode and curriculum system, as well as how to implement and assess students' innovation and entrepreneurship literacy in colleges and universities. I believe it will serve as a resource for colleges and universities teaching innovation and entrepreneurship.

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