

# Research on Cultivating Innovation and Entrepreneurship Abilities of College Students in the New Era

Xincen Jiang, Tong Li

Southwest Petroleum University, Chengdu 610500, China

## Abstract

Deepening the reform of innovation and entrepreneurship education for college students is an important measure to implement high-quality education reform in China. We should actively explore new ways of talent cultivation with the goal of improving the quality of innovative talents, and integrate innovation and entrepreneurship education throughout the entire process of professional education. The improvement of innovation and entrepreneurship abilities among college students is not only beneficial for achieving the strategic goals of an innovative country and accelerating supply side structural reform, but also for alleviating employment pressure in the post pandemic era and improving the entrepreneurship and education system in universities. However, universities face many challenges such as insufficient awareness of innovation and entrepreneurship among college students, rigid course content, narrow practical platforms, and lack of evaluation standards. The cultivation of innovation and entrepreneurship abilities among college students requires a systematic guarantee mechanism. Through measures such as creating an atmosphere, promoting the integration of expertise and innovation, strengthening collaborative education, and establishing a diversified evaluation system, innovation and entrepreneurship are integrated into the entire process of talent cultivation, in order to provide strong talent protection for improving social competitiveness and assuming national responsibilities.

## Keywords

New era, Innovation and entrepreneurship; Ability development; College students.

## 1. Historical Background

The report of the 20th National Congress of the Communist Party of China pointed out that "adhering to science and technology as the primary productive force, innovation as the primary driving force, and talent as the primary resource, implementing the strategy of revitalizing the country through science and education, innovation driven development, and talent driven development, continuously opening up new fields and tracks for development, shaping new driving forces and advantages for development." [1] Cultivating high-quality innovative talents in the new era is an urgent requirement for improving the quality and efficiency of China's economy. As an important component of the education system, universities should deeply implement the Party's educational policies and fully implement the fundamental task of cultivating morality and talents. Actively explore new ways of talent cultivation with the goal of improving the quality of innovative talents, and integrate innovation and entrepreneurship education throughout the entire process of professional education.

## 2. The Importance of Enhancing the Innovation and Entrepreneurship Ability of College Students in the New Era

In the VUCA era, cultivating new talents with innovative thinking, innovative abilities, and taking on national responsibilities has become a necessity for a strong country and a call of the

times. Universities play a key role in promoting economic structure adjustment and upgrading, promoting the transformation of old and new driving forces, and cultivating talents. In recent years, "innovation and entrepreneurship education in universities has been continuously strengthened, and positive progress has been made, playing an important role in improving the quality of higher education, promoting the comprehensive development of students, promoting graduates' entrepreneurship and employment, and serving the construction of the new era." [2]

### **2.1. Beneficial for stimulating the innovative vitality of college students and promoting the construction of a technological powerhouse**

The development of a country cannot be separated from the enhancement of independent innovation capabilities and the talent support for promoting science and education. Education is the major plan of the Party and the country<sup>[3]</sup>, and college students are an important force in promoting national development in the future. By cultivating the innovative consciousness and ability of college students, enhancing the innovation and entrepreneurship practice teaching of college teachers, increasing the training of innovative talents, and providing favorable talent guarantees for building an innovative country. China's industrial structure is undergoing an important stage of transformation from labor-intensive to technological innovation oriented, and the country has put forward higher requirements for the literacy and quality of innovative talents. Universities should actively respond to the national call, fully implement the fundamental task of cultivating morality and talents, with the goal of improving students' innovative spirit and ability, fully stimulate the innovative vitality of contemporary college students, enhance their innovative literacy, accelerate the development of new productive forces, and help China achieve the grand blueprint of a modern and strong country as soon as possible.

### **2.2. Beneficial for promoting supply side reform and accelerating industrial structure transformation and upgrading**

In 2017, the "Several Opinions of the General Office of the State Council on Deepening the Integration of Industry and Education" proposed that "deepening the integration of industry and education, promoting the organic connection between the education chain, talent chain, industry chain, and innovation chain, is an urgent requirement for promoting the supply side structural reform of human resources." [4] Innovation has become a new trend in industrial development, and modern enterprises have put forward new demands for innovative and entrepreneurial talents who have innovative thinking, can think independently, and solve problems. The report of the 20th National Congress of the Communist Party of China emphasizes the coordinated innovation of vocational education, higher education, and continuing education, promoting the integration of vocational education, industry and education, and science and education, optimizing the positioning of vocational education types. [5] High quality innovative talents with applied and compound abilities are the objects of collaborative training among universities, enterprises, and governments, and the government provides certain policy support and social security for the cultivation of innovative and entrepreneurial talents; Enterprises should create corresponding internship practice platforms guided by the characteristics of the times; As the core subject of cultivating innovative talents, universities can benchmark the development needs of enterprises, integrate high-quality resources from all parties, and help college students understand cutting-edge business knowledge through methods such as "integration of expertise and innovation", industry education cooperation, and school enterprise cooperation; On the other hand, it can also be based on job positions, apply what is learned, and bring new nutrients to the deepening reform of enterprises with the unique new concepts and ideas of young college students. Together with enterprises, we can overcome technical difficulties, enhance competition and market vitality,

promote the transformation of new and old driving forces, accelerate the optimization and upgrading of industrial structure, and empower the rapid development of the social economy.

### **2.3. Beneficial for improving the quality of talent cultivation and expanding employment channels for college students**

In 2014, Premier Li Keqiang proposed "mass entrepreneurship and innovation", and innovation and entrepreneurship have become a trend in the whole society. Faced with the enormous pressure brought by the economic downturn in the post pandemic era, innovation and entrepreneurship are undoubtedly the winning strategies for college graduates to solve their employment difficulties. Against the backdrop of significant changes in the current market environment and extremely fierce job competition, how to effectively improve the employment ability of college students is one of the most important issues that all sectors of society and major universities attach great importance to. Guiding college students to gradually recognize the increasingly severe employment situation, awaken employment awareness, actively think about how to transition from innovation to entrepreneurship, establish innovative thinking patterns, and improve their comprehensive quality is of great benefit to alleviating employment pressure. The orderly implementation of innovation and entrepreneurship work in universities can effectively enhance the employment and entrepreneurship competence of college students, and help promote them to contribute their own strength to social development and create more job opportunities while fully realizing their own value. Therefore, universities have the obligation and responsibility to create a new ecosystem of innovation and entrepreneurship, develop talent training programs guided by economic development needs and social progress, help college students change their employment concepts, establish correct employment, career selection, and values, continuously improve their innovative spirit, and enhance their practical application abilities in innovation and entrepreneurship. This is an urgent requirement to ensure high-quality and full employment for college students.

### **2.4. Beneficial for improving the entrepreneurial education system in universities and further deepening educational reform**

Talent quality is an important indicator of the level of higher education, and innovation and entrepreneurship education is the goal and direction of higher education reform. Cultivating high-quality innovation and entrepreneurship talents for our country is an inevitable requirement for implementing the strategy of revitalizing the country through science and education, and it is also the fundamental driving force for improving the quality and efficiency of our economy. It is the ultimate goal of deepening innovation and entrepreneurship education reform in the new era. Universities should continuously improve the quality of talent cultivation by taking into account their own development plans, professional characteristics, regional socio-economic development levels, and talent needs. Based on the needs of economic and social development in the new era, and referring to the actual situation of local school development, establish a practical and distinctive innovation and entrepreneurship education system. We always adhere to the student-centered approach, strictly adhere to the laws of talent cultivation, scientifically combine the quality standards of professional teaching with the school's talent education policies and objectives, comprehensively implement the education and teaching reform mechanism, take innovation and entrepreneurship as the weak link, reform the talent cultivation mechanism comprehensively, systematically, and synergistically, vigorously promote the construction of a curriculum system that deeply integrates innovation and entrepreneurship, establish an innovation and entrepreneurship practice platform and corresponding policy guarantee measures, and implement the requirements for cultivating students' innovation and entrepreneurship abilities and qualities throughout the entire process of talent cultivation, helping universities to develop innovation and entrepreneurship in all aspects.

### **3. Optimization Path for Enhancing the Innovation and Entrepreneurship Ability of College Students**

The innovation and entrepreneurship ability of contemporary college students is not only related to their personal value and career development, but also closely related to the efficiency of social and economic development. Faced with the new situation, new opportunities, and new challenges of building a modern strong country, college students should not only master solid professional skills, but also have the innovative spirit and entrepreneurial ability of "daring to be the first and facing difficulties".

#### **3.1. Creating an atmosphere and enhancing the enthusiasm of college students to participate in innovation and entrepreneurship**

The deepening of the reform of innovation and entrepreneurship education should adhere to the development concept of "student-centered and layered implementation", implement the fundamental task of cultivating morality and talents, and integrate innovation and entrepreneurship education throughout the entire process of talent cultivation. Firstly, enhance the awareness of innovation and entrepreneurship among college students. Adopt flexible and diversified publicity means, use official account, Tiktok account, microblog, bulletin board, school website and other forms to broaden the sources of innovation and entrepreneurship information, interpret social development trends and the latest industry trends, provide career planning, employment guidance and consulting services, and alleviate students' employment anxiety; Secondly, create a culture of innovation and entrepreneurship and establish corresponding incentive mechanisms. Establish a special fund for innovation and entrepreneurship, establish a college student innovation and entrepreneurship club, organize cultural festivals, debate competitions, knowledge competitions, and other activities with the theme of "innovation and entrepreneurship", provide comprehensive guidance to students through the integration of campus culture, social culture, and corporate culture, and stimulate the enthusiasm of college students to participate in innovation and entrepreneurship activities. In addition, successful entrepreneurial students can also be invited to return to campus to participate in activities, share entrepreneurial stories, experiences, and insights with younger students, exchange and interact on-site to help college students answer questions and set career goals, actively play the role of role models, enhance their sense of identity and responsibility for innovation and entrepreneurship, deepen their comprehensive understanding of innovation and entrepreneurship, enhance their entrepreneurial courage, and actively participate in entrepreneurial activities.

#### **3.2. Integration of specialization and innovation, improving the curriculum system of innovation and entrepreneurship for college students**

The Implementation Opinions of the General Office of the State Council on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education Institutions require: "Each university should promote the organic integration of professional education and innovation and entrepreneurship education based on the positioning of talent cultivation and the requirements of innovation and entrepreneurship education goals, explore and enrich innovation and entrepreneurship education resources in various professional courses, and strengthen innovation and entrepreneurship education in the process of imparting professional knowledge. [5] Universities should establish a systematic, open, and diversified innovation and entrepreneurship practice education system, focus on the future, keep up with the development trend of modernization construction, timely innovate education content, timely integrate advanced practical technology, the latest theoretical achievements, and cutting-edge enterprise cases into teaching resources, and promote the close integration of professional education and innovation and entrepreneurship." According to the innovation and

entrepreneurship talent training program, a curriculum system that balances theoretical knowledge and practical application is constructed. A phased and progressive teaching plan is adopted for different grades, and compulsory theoretical courses such as entrepreneurial opportunity identification, team components, marketing, and business models are offered. Elective courses can include relevant content such as company law, tax law, labor contract law, and intellectual property. In addition, setting up innovation and entrepreneurship psychological counseling courses to help college students establish a good entrepreneurial mentality, gradually forming a wide coverage and targeted curriculum system. By analyzing practical problems to enhance classroom vitality, increase practical interest in innovation and entrepreneurship, and encourage entrepreneurial mentors to deeply participate in teaching models, we cultivate students' innovation awareness, innovative thinking, and teamwork abilities through case analysis, sandbox simulation, and internship practice.

### **3.3. Collaborative education and sound guarantee mechanism for innovation and entrepreneurship among college students**

In order to further ensure the smooth operation of the innovation and entrepreneurship education mechanism for college students, universities should increase cooperation between industry, academia, and research, highlight the educational role of enterprises in cultivating innovation and entrepreneurship talents, and build a collaborative education practice platform that integrates "government, school, enterprise, and industry". The government provides targeted preferential policies and financial support through macroeconomic regulation, simplifies the administrative approval process, actively promotes and guides policies, and encourages college students to use their own advantages to establish high-tech enterprises; Schools should continuously improve their service levels, establish specialized agencies for long-term coordination and cooperation with enterprises, coordinate and promote the sharing of teaching, scientific and research project resources, and jointly establish curriculum systems, talent training programs, and internship practice bases with enterprises; Enterprises participate in the entire process of cultivating innovative and entrepreneurial talents for college students, based on the practical technical difficulties of the enterprise, explore market pain points, try project operations, and explore effective business models, so that students can have a deep understanding of the operation of the industry chain and project operations. Universities can also hire entrepreneurial experts, enterprise technicians, and senior project management experts as project mentors, collaborate to establish innovation and entrepreneurship project workshops, regularly give lectures and conduct innovation and entrepreneurship related lectures, complement the advantages of university teachers, fully expand students' professional perspectives, and actively promote the close integration of innovation and entrepreneurship in universities and enterprise economy. In addition, we will make every effort to leverage the guarantee mechanism of collaborative education, and universities, enterprises, and governments will use their respective advantages to carry out deep cooperation in related fields, leading students to experience the social environment and changing market demands at the grassroots level. College students will use their professional skills to promote the revitalization of rural industries, enrich their practical experience in innovation and entrepreneurship, enhance their core competitiveness in employment and entrepreneurship, and form a good situation of multiple subjects participating and internal and external collaborative education.

### **3.4. Diversified evaluation, leveraging the leading role of college students in innovation and entrepreneurship**

Improve the evaluation system for innovation and entrepreneurship, establish a combination of process evaluation and outcome evaluation, and use a series of achievements of college students in innovation and entrepreneurship activities as important indicators to measure

their comprehensive quality. Universities should be based on the overall situation, strengthen overall planning and systematic promotion, establish a multi-party evaluation system, classify and design according to the characteristics of different subjects, different stages, and different types of education, improve the overall quality of students, formulate corresponding evaluation indicators, clarify the issue of "what kind of people to cultivate and how to cultivate them", respect the laws of talent development, and truly guide students to improve their innovation and entrepreneurship abilities and promote their comprehensive and sustainable growth. Emphasis is placed on the process evaluation of student participation. The school provides all available resources such as funds, venues, equipment and facilities, and implements a social practice point system. In order to encourage students to participate in various innovation and entrepreneurship practice activities during winter and summer vacations, a "project+" approach is adopted to carry out the "second classroom" of innovation and entrepreneurship. In the construction and operation of actual projects, students are provided with opportunities to constantly try and error, fully exercise their leadership, organizational and coordination abilities, team cooperation and other abilities. The final social practice points can be converted into course credits. In addition, to ensure the effective improvement of the quality of innovation and entrepreneurship education for college students, universities should also build a professional and solid team of innovation and entrepreneurship teachers with a reasonable structure, complementary advantages, and the ability to proficiently use modern information technology. They can also invite experienced mentors from enterprises to join the ranks of innovation and entrepreneurship teachers through external recruitment, leading students to personally experience innovation and entrepreneurship practice activities such as project research, business planning, marketing, and program implementation, and improving the assessment mechanism for innovation and entrepreneurship teacher management, in order to encourage teachers to deeply participate in guiding students in innovation and entrepreneurship course works.

#### 4. Conclusion

In summary, the key to building an innovative country and enhancing China's independent innovation capability lies in the cultivation of innovative talents. As an important link in promoting high-quality development of education, innovation and entrepreneurship education for college students should take comprehensive practice as a breakthrough point, comprehensively promote the reform of innovation and entrepreneurship education models, dynamically grasp social development trends, and enhance the innovation awareness and entrepreneurial ability of college students as internal requirements. Practice should be used to shape the innovative character of college students, so that they truly have innovative behavior habits and value pursuits, injecting strong impetus into China's socialist modernization construction.

#### Acknowledgements

This paper was supported by the Innovation and Entrepreneurship Research Fund of Southwest Petroleum University (Southwest Petroleum University Humanities and Social Sciences Special Project (Innovation and Entrepreneurship) 084)

#### References

- [1] Li Zhan, Liu Bo. Basic economic institutional attributes, logical relationships, and contemporary values of China's scientific and technological innovation system and mechanism [J]. Journal of East China Normal University: Philosophy and Social Science Academic Press, 2023 (02): 133-145.

- [2] Opinions of the Ministry of Education of the People's Republic of China on Vigorously Promoting Innovation and Entrepreneurship Education in Higher Education Institutions and Autonomous Entrepreneurship among College Students. [EB/OL] (2010-05-13) [2023-09-18] [http://www.moe.gov.cn/srcsite/A08/s5672/201005/t20100513\\_120174.html](http://www.moe.gov.cn/srcsite/A08/s5672/201005/t20100513_120174.html).
- [3] General Office of the State Council. Several Opinions of the General Office of the State Council on Deepening the Integration of Industry and Education [EB/OL]. (2017-12-19) [2022-06-29]. [http://www.gov.cn/zhengce/content/2017-12/19/content\\_5248564.htm](http://www.gov.cn/zhengce/content/2017-12/19/content_5248564.htm).
- [4] Implementation Opinions of the General Office of the State Council on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education Institutions [Z] [2015] No. 36.
- [5] Liu Tianji, Wang Lei, et al. The path to improve the innovation and entrepreneurship ability of college students in the context of "Internet+" [J]. Journal of North China University of Technology (Social Science Edition), 2023 (05) 97-98 Central Committee of the Communist Party of China. Implementation Outline of Patriotism Education in the New Era [N]. People's Daily, 2019-11-13(6).