



Research on the construction of innovation and entrepreneurship education system in local universities: A case study of Zhejiang normal university

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Abstract

Innovation and entrepreneurship education is a brand-new educational concept, which aims to cultivate applied talents with innovative spirit, innovative consciousness and innovative and entrepreneurial ability. Taking Zhejiang Normal University as an example and analyzing its school running characteristics, this paper constructs a multi-level three-dimensional innovation and entrepreneurship education system, including the target system, curriculum system, practice system, guarantee system and evaluation system, in order to provide theoretical guidance and practical countermeasures for comprehensively deepening the innovation and entrepreneurship education reform of Local Universities.

Keywords: Local Universities, Innovation and entrepreneurship, education, system, model

1. Introduction

In 2015, the General Office of the State Council of China issued the "Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Colleges and Universities", which put forward clear requirements for deepening the reform of innovation and entrepreneurship education in colleges and universities. The opinion emphasizes that colleges and universities should promote the reform of innovation and entrepreneurship education and cultivate high-quality innovative talents as a breakthrough to promote the all-round development of university students and help them obtain high-quality employment and entrepreneurial opportunities. The introduction of this policy will have a positive and far-reaching impact on the comprehensive reform of higher education in my country. Since then, colleges and universities have begun to actively carry out innovation and entrepreneurship education reform, which has also attracted the attention of many educational researchers. For entrepreneurial subjects, entrepreneurship is only an infancy stage in the life cycle of an enterprise, and the success of entrepreneurship depends to a large extent on the quality and ability of the entrepreneurial subjects and the degree of synergy between the entrepreneurial environment. The research on university students as the main body of entrepreneurship mainly focuses on the following three aspects: First, the research on the entrepreneurial quality of university students, entrepreneurial ability and entrepreneurial character have become the three dimensions of university students' entrepreneurial quality. The second is the research on entrepreneurship education for university students. Entrepreneurship education is a systematic project, and its characteristics of diversity, relevance and integrity depend to a large extent on the practice places provided by colleges and universities. At the same time, it is embedded in social networks and is affected by political, economic, cultural and other factors. The third is the research on the entrepreneurship policy of university students. Entrepreneurial policies play a guiding role in the core elements such as the consideration of entrepreneurial motivation before entrepreneurship, the development of skills during entrepreneurship, and the evaluation of effectiveness after entrepreneurship. The entrepreneurial environment of university students has gradually attracted the attention of scholars. The entrepreneurial ecosystem constructed by the government, enterprises, universities, society and other parties provides a realistic platform for university students' innovation and entrepreneurship, and also helps to improve the innovation and entrepreneurship ability of university students. Therefore, the survival of the entrepreneurial ecosystem is objectively manifested as the innovative growth of entrepreneurial subjects and the sustainable assistance of the entrepreneurial environment.

At present, the research on innovation and entrepreneurship education system, which can provide high-quality development direction for deepening innovation and entrepreneurship education reform, has become a current research hotspot in this field. Wang Zhanren proposed to build a college innovation and entrepreneurship education system with "common sense", "embedded model", "professional" and "occupation" as the core; Xu Liting and others believe that the innovation and entrepreneurship education system in colleges and universities should be composed of a target system, a process system, a guarantee system and an evaluation system; Li Shijiao introduced the innovation and entrepreneurship education system in colleges and universities with "one core, three platforms, and nine modules" as the backbone; Li Xiaohong and other researchers put forward their own ideas on the construction of innovation and entrepreneurship education system in colleges and universities from the aspects of goals, curriculum settings, and practice platforms.

2. Construction of innovation and entrepreneurship education system in local universities

The innovation and entrepreneurship education of local universities combines innovation education with entrepreneurship education, aiming at cultivating the innovation spirit, innovation consciousness and entrepreneurship ability of college students. With the participation of new economic elements such as the Internet, artificial intelligence, big data and other new economic elements in the process of my country's new normal economic development, the university innovation and entrepreneurship ecosystem will be constructed to provide a comprehensive and efficient entrepreneurship network for the college students in the region, so as to cultivate innovative and entrepreneurial talents and form a good innovation and entrepreneurship ecology with new economy and new employment, which is conducive to promoting the construction of an innovation and entrepreneurship oriented society in the region and further promoting the development of the new economy.

This paper will build a multi-level and three-dimensional innovation and entrepreneurship education system including objective system, curriculum system, practice system, guarantee system and evaluation system, and actively promote the further development of innovation and entrepreneurship education in universities.

2.1 The target system of innovation and entrepreneurship education in local universities

The goal of university innovation and entrepreneurship education is to cultivate talents with comprehensive quality of innovation and entrepreneurship, focusing on shaping college students' innovative spirit, innovative consciousness, innovative knowledge, innovative ability and innovative character, and forming a "five-in-one" university innovation and entrepreneurship education concept.

2.1.1 Foster the innovation and entrepreneurship spirit of College Students

The spirit of innovation and entrepreneurship refers to the spirit of innovation, the spirit of daring to bear all kinds of uncertainties, the spirit of dedication, the spirit of cooperation and a strong sense of social responsibility that college students must possess in the process of entrepreneurship. The most important is the spirit of innovation and the

revolutionary spirit inherited in the red glorious tradition of the region.

2.1.2 Stimulate college students' awareness of innovation and entrepreneurship

Stimulating college students' awareness of innovation and entrepreneurship is the starting point of university innovation and entrepreneurship education, including the needs, motivations, interests and ideals of innovation and entrepreneurship activities.

2.1.3 Enrich college students' knowledge of innovation and entrepreneurship

Enriching the innovation and entrepreneurship knowledge of college students is the main task of university innovation and entrepreneurship education. The so-called knowledge of innovation and entrepreneurship mainly refers to professional or vocational knowledge and comprehensive knowledge of enterprise management, which plays a vital role in the innovation and entrepreneurship activities of universities and always affects innovation and entrepreneurship activities.

2.1.4 Improve the innovation and entrepreneurship ability of college students

Innovation and entrepreneurship ability refers to a comprehensive ability covering innovation ability, planning ability, coordination ability and organizational ability. It can determine whether the university's innovation and entrepreneurship activities can be successfully implemented and effectively completed.

2.1.5 Cultivate the literacy of innovative and entrepreneurial activities of college students

The innovation and entrepreneurship literacy of college students mainly includes the following dimensions: grasping entrepreneurial opportunities, transferring entrepreneurial risks, taking entrepreneurial responsibility, maintaining innovation and entrepreneurship passion, and insisting on innovation and entrepreneurship beliefs. These are important guarantees and supports for college students to succeed in innovation and entrepreneurship activities.

2.2 Innovation and entrepreneurship education curriculum system of local universities

University innovation and entrepreneurship curriculum system is one of the important ways to achieve the goal of university innovation and entrepreneurship education. The system mainly includes courses in theoretical knowledge, practical skills, and local cultural environment. All elements are interlinked within the system, and they work together to effectively ensure the steady improvement of the quality of innovation and entrepreneurship education in local universities.

2.2.1. Theoretical knowledge course

2.2.1.1. Setting up general education courses

First of all, for freshmen, we should offer general courses in the fields of economics, management, psychology, law, philosophy, public relations, aesthetics, history and other cultural and artistic fields to broaden the knowledge of college students and inspire them interest in innovation and entrepreneurship, and build their innovative and entrepreneurial ideas. Secondly, we should provide freshmen and sophomores with general education courses in innovation

fields such as innovation foundation, introduction of innovative thinking, innovation education and technological innovation, so as to cultivate college students' innovation and entrepreneurship awareness, give them opportunities for innovation and entrepreneurship, and stimulate their innovation and entrepreneurship potential. At the same time, it encourages them to change the existing rigid thinking mode and expand the openness and criticality of their thinking. Finally, for the senior students in the third and fourth year of the University, we should guide them to learn career planning, entrepreneurship foundation, entrepreneurship management, case analysis, entrepreneurship simulation and other entrepreneurship general courses, so as to meet their basic needs for entrepreneurship and wake up their innovation and entrepreneurship motivation and entrepreneurial spirit.

2.2.1.2 Setting up professional innovation courses

On the one hand, in the training plan, according to the characteristics of the major, set up corresponding courses of innovation and entrepreneurship activities; At the same time, it can also integrate the ideas and methods of innovation and entrepreneurship.

2.2.2 Practical skills courses

2.2.2.1 Setting up professional practice courses

Through the establishment of various professional cognition, basic experiments, comprehensive training, practice, graduation design and other courses, students' basic professional skills, core skills, employment skills, comprehensive design ability to solve practical problems and skills of applying knowledge are cultivated, so that students can be in Master skills in practical activities, improve basic skills, and enhance the practical application ability of comprehensive knowledge.

2.2.2.2 Setting up practical courses for science and technology competitions

Such courses are mainly aimed at innovation and entrepreneurship technology competitions and corresponding simulated practical activities. The former usually includes various college students' innovation and entrepreneurship competitions, training projects, creative competitions, extracurricular work competitions, and various forums, lectures, speeches, and experience sharing sessions involving college students' innovation and entrepreneurship activities.

The latter can be simulated by computer software such as entrepreneurial star, ERP sand table, bizsim enterprise competition. In addition, we can also provide college students with the opportunity to practice in science and technology parks, carry out planning or participate in enterprise management for small and medium-sized enterprises, so as to fully stimulate their passion for innovation and entrepreneurship activities, help college students explore their innovation and entrepreneurship potential, and improve their innovation and entrepreneurship ability in the process of practice.

2.2.3 Culture and environment course

This kind of course is recessive. Its purpose is to create a good environment and atmosphere for the development of innovation and entrepreneurship activities, imperceptibly cultivate the innovation and entrepreneurship consciousness of college students, and gradually improve the innovation and

entrepreneurship ability of college students. Campus culture, especially the traditional culture that can highlight local characteristics, should become the support of innovation and entrepreneurship education in local universities, so that it is consistent with the school spirit, teaching style and academic atmosphere, and create a positive, interactive and harmonious public atmosphere and psychological environment for innovation and entrepreneurship. In addition, team cooperation between teachers and students, optimistic public opinion, firm and correct beliefs can all become potential driving forces to educate and influence students in a subtle way and build a warm and friendly innovation and entrepreneurship ecology.

2.3 Practice system of innovation and entrepreneurship education in local universities

Practical teaching is an indispensable link in the university talent training project, and an important way to consolidate theoretical knowledge and cultivate practical ability. Improving the practical education system and promoting the innovation of practical teaching are the urgent tasks faced by the reform of practical teaching in local universities. In this regard, some practices of Zhejiang Normal University are worth learning and learning from local universities.

First of all, Zhejiang Normal University has established the concept of "great practice" and established a pattern of all-round education. Zhejiang Normal University not only takes education internship, education practice, education study, graduation thesis, etc. as important contents of practical education, but also includes military training, social investigation, production labor, social service, scientific and technological invention, work study and other types of practical activities into the professional talent training program. Practical education not only involves majors, courses and teachers, but also requires close cooperation between schools and departments to form a joint force for education. On the basis of integrating the previous construction, each specialty of each local university should strive to create a practical teaching system that meets the needs of talent training and basic education of each university.

Secondly, Zhejiang Normal University innovates the content of practice and promotes classified training. Basic practice focuses on cultivating students' basic quality, mastering basic skills, guiding students to use the knowledge and skills they have learned to serve the people and contribute to society. Professional practice should focus on training students' professional core abilities, designing teaching contents, offering comprehensive practical courses, and carrying out comprehensive teaching practice covering multiple courses. Comprehensive practice should design differentiated practical teaching contents according to the requirements of classified training and different training objectives.

Finally, Zhejiang Normal University improved the practice methods and methods to enhance the practice effect. Through carrying out practical activities involving a number of practical contents in combination with the characteristics of each specialty, such as the combination of the practice link of Ideological and political theory courses with military training, community activities, social services and professional practice, the combination of social practice with social services and professional practice, the combination of production labor and professional practice, innovation and entrepreneurship practice with teachers' scientific research

projects, discipline competitions at all levels, innovation and entrepreneurship activities, etc., comprehensive practical teaching activities are formed, so as to promote the combination of learning and thinking, the unity of knowledge and action, and improve the practical ability and innovation ability of students.

The practice system of innovation and entrepreneurship education is the gradual deepening of the teaching and activity system of innovation and entrepreneurship education, from a simple basic system to a more complex deep-level system. Through this system, local universities organically combine professional teaching activities, social practice activities, practical training activities, scientific research activities, and entrepreneurial practice activities to create a step-by-step innovation and entrepreneurship education practice path. With innovation and entrepreneurship education as the goal, local universities should further explore ways to combine innovation and entrepreneurship practice activities with professional practice teaching, and build a practical teaching system (platform) of innovation and entrepreneurship education mainly from four dimensions: basic experiment teaching, creative experiment teaching, social practice teaching and cooperative practice teaching.

2.4 Innovation and entrepreneurship education guarantee system of local universities

The innovation and entrepreneurship education guarantee system of local universities is "open". Under such a dynamic environment, its stable, efficient and rapid development needs to rely on a comprehensive and cooperative guarantee system. Therefore, local universities should strive to build a "three in one" collaborative guarantee system of innovation and entrepreneurship education with the participation of universities, governments and society.

2.4.1 Institutional guarantee of innovation and entrepreneurship education

Innovation and entrepreneurship education should be jointly constructed by the government, universities and society, with the government as the leading role, the University as the main body and the society as the platform.

2.4.2 Teacher guarantee for innovation and entrepreneurship education

First of all, it is necessary to help the majority of university teachers to better understand the connotation of university innovation and entrepreneurship education and constantly improve their innovation and entrepreneurship ability. Second, we will vigorously train teachers and create a better team of innovative and entrepreneurial teachers. Finally, we should establish a full-time teaching team for innovation and entrepreneurship courses.

2.4.3 Service guarantee for innovation and entrepreneurship education

First, establish intermediary service institutions to provide guaranteed loans and advisory services in business and taxation. Second, establish a service platform and network information platform to collect, organize, sort out and summarize information related to innovation and entrepreneurship activities, and timely update market changes and relevant policy information. Finally, technical support should be established to provide technical and intellectual support, instruments and other hardware and other resources.

In this regard, some practices of Zhejiang Normal University are worth learning from local universities. The school starts from the construction of student entrepreneurship base; Students' innovation project funding, participation in Teachers' scientific research work funding, innovation practice training projects and application skills training, and make full use of the national and Zhejiang Provincial College Students' innovation and entrepreneurship training program, Zhejiang Normal University College Students' practice and innovation training program and entrepreneurship Park. At the same time, learn from successful cases such as Baide education company and authentic translation company to cultivate students' innovation and entrepreneurship ability. Zhejiang Normal University has also specifically developed corresponding characteristic college students' innovation and entrepreneurship projects in combination with its own discipline advantages and the concentration of foreign-funded enterprises in Jinhua. The specific examples are as follows:

Table 1

Project	Year	Specific contents
Provincial projects for College Students' innovation and Entrepreneurship	2020	1. Entrepreneurship Research of Education Group Integrated Study Abroad, Foreign Language Training and Translation
Provincial Guidance Project for College Students' Innovation and Entrepreneurship	2019	1. The Influence of Foreign Film and Television on Contemporary Chinese College Students
University-level Guidance Project for College Students' Innovation and Entrepreneurship	2018 2020	1. Investigation and Research on Cultural Differences between Chinese and Western Etiquette from a Cross-Cultural Perspective 2. Cultural Mutual Influence and Reference between China and Africa

2.5 Evaluation system of innovation and entrepreneurship education in local universities

We need to continuously improve the quality and level of innovation and entrepreneurship education in local universities through scientific and reasonable evaluation.

2.5.1 Establish correct evaluation concept

In order to successfully carry out the evaluation of innovation and entrepreneurship education in universities, we must establish correct evaluation criteria, that is, correct values, accurate functional positioning, and scientific quality

standards. The purpose, content and method of evaluation are also closely related to the evaluation concept.

2.5.2 Establish diversified evaluation subjects

The multi-level evaluation subject system of university innovation and entrepreneurship education is composed of government, media, intermediary institutions and scholars. Each subject is highly complementary, which also highlights the diversity of university innovation and entrepreneurship education evaluation.

2.5.3 Select appropriate assessment content and correct assessment time

The innovation and entrepreneurship education in universities has certain hysteresis. Therefore, it is impractical to evaluate it at the initial stage, and it is extremely important to correctly decide what to evaluate and when to evaluate.

2.5.4 Establish the evaluation mechanism of innovation and entrepreneurship education

First, we should establish a complete evaluation index system. Second, we should constantly innovate the evaluation methods to ensure that the survey statistics are comprehensive and effective.

In this regard, some practices of Zhejiang Normal University are also worthy of reference by local universities. The university has established relevant third-party evaluation and feedback mechanism, and entrusted Zhejiang recruitment and employment center to carry out third-party evaluation every year and prepare the annual graduate employment quality report. In the report on the employment quality of graduates, a return visit is conducted to the graduates in the form of questionnaires. The content of the return visit involves the evaluation of the graduates on the school's innovation and entrepreneurship education. Of course, it also includes the evaluation of the graduates' professional growth, the overall satisfaction with the alma mater, the recommendation to the alma mater, the evaluation of school education and teaching, the evaluation of management services, and the evaluation of employment guidance services.

Zhejiang Normal University will make timely adjustments to the large amount of first-hand research information and opinions collected. For example, according to the evaluation results of graduation requirements, the modules of innovation and entrepreneurship education, crossover and personality development of the proofreading have been further improved, and teachers and related teaching resources have been optimized; Based on the evaluation of the achievement degree of the training objectives, improve the innovation and Entrepreneurship Education Section in the 2020 talent training plan, and refine the innovation and entrepreneurship curriculum objectives and teaching contents according to the graduation requirements and curriculum setting matrix; We will promote the evaluation of the degree of achievement of the objectives of innovation and entrepreneurship courses, realize the gradient construction of the evaluation of innovation and entrepreneurship courses, and effectively improve the teaching contents, teaching methods and evaluation methods.

3. Conclusion

Innovation and entrepreneurship education is an important content of cultivating high-quality, innovative and applied talents, and is the deepening and refinement of quality education. Each local university should choose an innovation and entrepreneurship education mode suitable for its own positioning and school running conditions, always adhere to the core of talent training, emphasize the joint efforts between the first class and the second class, establish an all-round innovation and entrepreneurship education system covering both inside and outside the University, and further promote the high-quality and leap forward development of innovation and entrepreneurship education in local universities.

It is an inevitable requirement of the development of the times and reality for universities to carry out innovation and entrepreneurship education, and it is also an inevitable trend of higher education reform. Entrepreneurship is another mode of employment. The difference is that entrepreneurs do not passively wait for others to give them employment opportunities, but actively create "rice bowls" for themselves and others. To promote college students' Entrepreneurship and innovation, in addition to entrepreneurship as a solution to relieve the current employment pressure, it is more important to guide college students to have a pioneering spirit. Under the background of new economic development, it is of great significance for local universities to further develop and improve the effect of innovation and entrepreneurship education to carry out the research on innovation and entrepreneurship education ecosystem. The establishment of entrepreneurship and innovation education curriculum system is conducive to improving the comprehensive quality of local university students, and can effectively enhance the core competitiveness of regional higher education.

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