

Establishment and Construction of Innovation and Entrepreneurship Education System in Colleges and Universities

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Abstract: Starting from the reform of the training mode of innovative talents and aiming at cultivating students innovative and entrepreneurial abilities, this paper explores the training mode of innovative and entrepreneurial talents based on "task-driven and project-oriented", establishes and implements the education system and training system of innovative and entrepreneurship for college students, so as to improve students' innovative and practical abilities.

1. Introduction

At present, it is the requirement of the times to improve the innovative spirit and ability of College students, and it is also the key and difficult point to improve the quality of teaching. For a long time, the goal of talent cultivation in Chinese universities has been simply divided into Research-oriented and applied-oriented talents [1, 2]. However, the educational concept holds that the choice facing college graduates is employment, postgraduate entrance examination and going abroad, and the innovation and entrepreneurship education has not been raised to the same important position as general education. Therefore, few students have the ability of innovation and entrepreneurship. This is the weakness of China's higher education and the severe challenge we are facing [3, 4]. At present, the fundamental problem of higher education is the quality of personnel training. Its core is the cultivation of the innovative spirit and innovative entrepreneurship ability-innovative talents of college and university students. This is the full reflection of the objectivity of higher education to the social economy, the demand for social-economic development and the inevitability of internal regularity to the teaching quality of higher education. Its realization form is the combination of higher education with science and technology, economy, culture and society, the promotion of scientific and technological innovation and Humanities and social science research, the acceleration of the transformation of scientific and technological achievements to realistic productivity, and the promotion of it. Advanced culture keeps advancing, bringing up hundreds of millions of high-quality workers, tens of millions of specialized talents and a large number of top innovative talents. The report of the Seventeenth National Congress of the Communist Party of China clearly points out that the strategy of expanding employment development should be "promoting employment driven by entrepreneurship". Education in the era of the knowledge economy is not only a training office for students' employment but also an education of innovation and entrepreneurship [5, 6].

2. Establishment of innovation and entrepreneurship education system for college students

According to the objective requirements of the construction of "innovative country" in our country, as well as the construction of "Shaanxi national innovative province", "Shaanxi free trade pilot area" and "Xi'an national comprehensive innovation reform pilot area", we should take the scientific development concept as the guide, strengthen entrepreneurship education as the goal, reform and innovation as the driving force, strengthen the theoretical research of innovation and entrepreneurship education, and further improve the existing curriculum system. Teaching mode, teaching content and teaching method, actively explore a new type of personnel training mode for students majoring in surveying and mapping (remote sensing science and technology), and train and transport more innovative, creative and entrepreneurial talents with modern consciousness and spirit of the times for the society.

Setting up a series of innovative entrepreneurship courses (including compulsory and optional courses) in various professional training programs. The Ministry of Education issued the Notice on the Work of Employment and Entrepreneurship for Graduates of National Colleges and Universities in 2016, which clearly stated that all colleges and universities should set up innovation and entrepreneurship education courses from 2016, and set up compulsory courses and elective courses of innovation and entrepreneurship education for all students, which should be included in credit management. Compulsory and optional courses generally include innovation and entrepreneurship practice, entrepreneurship project management, scientific and technological paper writing, and college students' entrepreneurship preparation.

Setting up a Series of Lectures on Innovation and Entrepreneurship in the Second Classroom Activities. Strengthen the content of scientific and technological innovation and social practice in the second classroom, and strengthen the training of innovation and entrepreneurship. To develop innovative entrepreneurship training programs for potential students, establish innovative entrepreneurship files and transcripts, objectively record and quantitatively evaluate innovative entrepreneurship activities of students. Priority should be given to supporting students who participate in innovation and entrepreneurship to transfer to relevant majors.

3. Constructing and implementing the training system of innovation and entrepreneurship for college students

At present, the major of Remote Sensing Science and technology has three educational platforms: general education, professional education, and comprehensive education. General education and professional education are completed in class, and comprehensive education is completed outside class (the second classroom). The training of scientific and technological innovation and entrepreneurship skills is mainly embodied in extracurricular comprehensive education. At this stage, the system construction is vague and the content is not clear, which makes it difficult to cultivate students' innovative and entrepreneurial ability.

In the future comprehensive education stage, extracurricular activities such as science and technology activities, discipline competitions, humanities and ideological quality education, brand lectures, mass activities, theoretical and cultural competitions, literary and artistic activities, social practice activities and vocational skills training will be integrated into the two classroom activity of "Innovation and entrepreneurship training system for college students". There are five aspects of industry training, science and technology competition, humanistic quality improvement and vocational skills training. Each project category is composed of several specific activities.

The training plan for scientific research innovation is mainly to organize and carry out various activities of scientific research (including students applying for scientific research projects,

participating in research projects of teachers, etc.), technological inventions, innovative experiments, open experiments and so on.

The entrepreneurship training program mainly organizes entrepreneurship education and entrepreneurship practice activities. In particular, through various scientific research training, students should be guided to actively participate in the curriculum, and their practical ability and innovative and entrepreneurial consciousness should be continuously strengthened.

Science and technology competition plans mainly organize to participate in the subject competition, challenge cup competition, geographic information, remote sensing technology, and other skills competition.

The humanistic quality improvement program is mainly to organize and carry out community activities, theoretical and humanistic lectures, and public classes, as well as literary and artistic sports activities.

The vocational skills training program mainly encourages students to participate in the training and verification activities of professional skills such as foreign language ability, computer application ability, and other tools.

The contents of the above five aspects will be incorporated into the training program of innovative talents in the form of credits or class hours as the graduation credits of students.

4. Establishment of operation and management mechanism for implementing university innovation and entrepreneurship education system

According to the principle of "overall design, separate implementation", the training system of innovation and entrepreneurship implement the project responsibility system and adopts the method of project management to organize the implementation. The program will run through the whole training process, rolling every semester in the form of a second classroom activity project, so that students can choose relevant projects and their study time according to their hobbies, abilities, and expertise. Establish an organization for training college students in innovation and entrepreneurship. Relevant functional departments carry out the management of each planned project according to the work subsystem so that the implementation of the plan can be incorporated into the daily management of the school. The college is responsible for organizing students to participate in various school-level activities of the innovation and entrepreneurship training plan for college students, undertaking the implementation of the planned project for the whole school according to the entrustment of the school, planning and organizing the innovation and creation of college-level students in an all-round way. In the vocational training program, students choose specific activities and time according to their own wishes, thus forming an innovative entrepreneurship training mechanism of interaction among schools, colleges, and students. To formulate the management methods and rules for the implementation of innovation and entrepreneurship training for college students and for the organization and implementation of various projects, such as the conversion of innovative experiments, publishing papers, obtaining patents and independent entrepreneurship into credits and conversion coefficients, etc. Establish the management methods of funds for innovative entrepreneurship training for college students, and establish the management system of innovative entrepreneurship education for college students. For example, project experiments and other activities are identified as the methods and conversion coefficients of classroom learning. On the basis of extensive investigation and research of similar undergraduate colleges and universities, the research contents and evaluation methods of the universities' evaluation of innovative entrepreneurship training mode are systematically designed, and three types of evaluation index systems are formed, i.e. foundation, specialty, and discipline. The index system will consist of the first-level index, second-level index, index weight, and index connotation. Through expert

investigation, following the steps of calculating index weight by analytic hierarchy process, the index weight is scientifically determined after repeated.

5. Conclusion

According to the goal of the construction of innovative universities, this paper integrates innovation and entrepreneurship education into talent cultivation, stimulates the enthusiasm of college students for innovation in various social practice activities such as scientific research, technological development and discipline competitions, and conducts research on innovation and entrepreneurship education system.

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References

- [1] Ying Liu. (2019) *Research on the Innovation and Entrepreneurship Education System Based on Task Driven and Project-Oriented*. *International Journal of Social Sciences in Universities*, 2(2), 122-125.
- [2] Tan Xiaohui, Zhang Jianzhi, Guan Xiaozhou, etc. (2015) *Research and Exploration of Innovation and Entrepreneurship Education System for College Students*. *Innovation and Entrepreneurship Education*, 6 (5), 25-27.
- [3] Wei Yinxia, Huang Ke, Guo Qing. (2015) *Research and Practice of Innovation and Entrepreneurship Education System in Local Engineering Universities*. *Experimental Technology and Management*, 32(2), 14-17.
- [4] Huang Linnan, Ding Lijian. (2010) *Exploration of Creative and Entrepreneurial Education Model for College Students*. *Research on Higher Engineering Education*, (6), 158-160.
- [5] Ma Huimin. (2012) *Research on the Trinity Training System of College students' Innovative and Entrepreneurial Ability*. *Educational Theory and Practice*, (36), 12-14.
- [6] Wang Lifen, Li Jiming, Wang Wenxian. (2014) *Exploration on the Construction of Practice Platform for College Students*. *Educational Theory and Practice*, (18), 22-23.