

Improving the Strategy of College Students' Innovation and Entrepreneurship Based on Maker Space

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ABSTRACT. *At present, the realization of maker space in colleges and universities will inevitably lead to the transformation of innovation and entrepreneurship education. In particular, it can promote the concept, mode, function and innovation, entrepreneurship education awareness, goals and system changes of makers. This paper compares and analyzes the status quo of innovation and entrepreneurship education in colleges and universities and the innovation and entrepreneurship of maker space.*

KEYWORDS: *Maker space; College students; Innovation and entrepreneurship*

1. Introduction

In terms of culture, the innovation and entrepreneurship culture of colleges and universities is still not strong. Compared with the maker space, indoctrinating teaching and passive learning are still the main ones, lacking innovative thinking and independent thinking. In terms of institutional mechanism, colleges lack space like makers. Activity organization mechanism and innovation incentive mechanism. In terms of talent quality, compared with the maker space, students lack effective innovative skills, production methods and guidance training for entrepreneurial knowledge, and teachers have great deficiencies in practice and industry perspective. In terms of hardware investment, compared with the maker space, colleges lack specialized and open physical space to serve the creative design communication training. On the platform, compared with the maker space, the interior and exterior of the school are relatively closed, and it has not effectively formed a comprehensive platform for exchange and cooperation of various disciplines and the introduction and utilization of industrial resources, and lacks a dedicated online and offline communication space. This shows that in all aspects of innovation and entrepreneurship education, there is still a large room for development in colleges and universities regardless of the number of factors or the quality of factors.

2. The Status Quo of Innovation and Entrepreneurship in Colleges and Universities

First, the innovation and entrepreneurship culture in the campus is not strong, long-term exam-oriented education and standardized examinations form an inculcation, passive, one-to-many education, students lack of independent thinking, hands-on ability, critical spirit and cooperative interaction.

Second, the institutional mechanism of innovation and entrepreneurship education is still not perfect. The innovation and entrepreneurship activities of college teachers and students are a pioneering activity with high investment, high risk and long time. However, the relevant assessment system, guarantee system and coordination of innovation and entrepreneurship education in colleges and universities the mechanism has not been fully established.

Thirdly, the lack of talents for innovation and entrepreneurship education leads to a lack of comprehensive quality of innovation and entrepreneurship talents: in the curriculum and curriculum preparation, there are fewer types of innovation and entrepreneurship courses, less class hours, more obsolete content, and lack of novel cases. Lack of hands-on training.

Insufficient investment in hardware facilities. In the curriculum construction and teaching arrangement, the laboratory software and hardware resources for innovation activities are insufficiently allocated. The laboratory facilities and other resources mainly serve the relevant professional courses, and cannot serve the innovative entrepreneurial activities in a targeted manner, lacking creative design and production. Tooling equipment and professional guidance for processing activities.

3. Maker Space and College Innovation and Entrepreneurship Education Strategy

3.1 The Trend of Innovation and Dual Docking Strategy

(1) Strengthening the Connection with Modern Technology

It is necessary to interpret the question of modern science and technology from the innovation and entrepreneurship education of colleges and universities from the local level. Under the thinking of “using science and technology as the driving force, science and technology as the support, and science and technology as the platform”, modern science and technology, such as information technology and biology, are not only Technology, new materials technology, new energy technology, space technology, optoelectronics and low-light technology, as well as traditional industrial technology, computer technology, multimedia technology, communication technology and Internet technology, as the main thrust of the development of innovation and entrepreneurship education in colleges and universities, and Introducing makers' 3D scanning, 3D printing, open source hardware, laser etching,

CNC numerical control equipment, open source software, social networking and other maker technologies to enrich and enrich the content and means of innovation and entrepreneurship education in colleges and universities, effectively solving previous developments. There are technical problems such as single teaching methods, boring teaching content, and lagging teaching techniques, so that every college student can learn modern technology, learn modern technology, master modern technology, and maximize the participation of college students in innovation and entrepreneurship education. Passion and interest.

(2) Strengthen the Docking with All Teachers and Students

It is necessary to further highlight the main position and function of college students in the innovation and entrepreneurship education in colleges and universities, rationalize the internal relationship between college students and innovation and entrepreneurship education, college students and schools, college students and teachers, especially according to the actual situation of college students. "Educational content and student needs docking, education direction and student academic docking, educational characteristics and student interest docking", and set "teamwork education, personal interest development education, group interactive education" as one of the education system, and according to the national strategy Policy, socio-economic, scientific and technological changes, and timely adjustment of its model, connotation and structure, so that each university student not only establishes modern innovation concepts, masters modern innovative technologies, and enhances modern entrepreneurial capabilities.

3.2 Diversification and Double Construction Ideas

(1) Building a School-Based Innovation and Entrepreneurship Curriculum System

According to the reality of education innovation in our school, under the principle of "innovation, entrepreneurship and professionalism, innovation, entrepreneurship and employment, innovation and entrepreneurship combined with industry", based on the establishment of a three-dimensional quality model framework for school-based college students' innovation and entrepreneurship, Develop a school-based curriculum system that meets the requirements of social and economic development and adapts to the requirements of students' innovation and entrepreneurship. In this course system, there are not only general-level courses such as "College Student Entrepreneur Preparation", "Entrepreneurial Project Management", "Innovative Entrepreneurship Practice", but also "Mobile Internet Innovation", "Entrepreneurial Project Management", "Cloud Computing and College Students Innovation and Entrepreneurship". Other professional courses, such as "simple robot production", "CNC CNC machine tools", "electric control technology", "artificial intelligence preliminary" and other technical courses, to meet the needs of different college students' innovation and entrepreneurship.

(2) Building a Multi-Polar Innovation and Entrepreneurship Education Alliance

Under the background of “innovation and innovation”, innovation and entrepreneurship education is not a matter of colleges and universities, but a common cause of government, society, schools, institutions, industries and enterprises. Therefore, it is necessary to carry out overall planning and construction at the height of the overall situation and strategy, especially through the establishment of national or regional multi-polar education alliances, such as the College Innovation and Entrepreneurship Education Steering Committee, Sichuan University Innovation and Entrepreneurship Education Research Association, and universities. Innovative entrepreneurship education school-enterprise alliance, college innovation and entrepreneurship education alliance, etc., strengthen the leading position of government departments, publicize the guiding significance of research institutions, pay attention to the synergy of colleges and universities, highlight the supporting role of industry and enterprises, so that every university can In the big framework of national innovation and entrepreneurship, we find the position of Bai Ji. Bai Jue starts from the overall situation and the long-term, and makes overall plans for school-based innovation and entrepreneurship education.

3.3 Entity to the Double Perfect Solution

(1) Improve the Operating System

Building a school-based “virtual innovation and entrepreneurship college” is a key link to improve the operational system. There are three basic functions: First, it is the management system of innovation and entrepreneurship education. Second, it is the technology platform for innovation industry education. Through the integration and application of a variety of modern technologies, we will create high-quality innovative and entrepreneurial school-based curriculum, promote online and offline coordination and harmony, and ensure the quality of innovation and entrepreneurship education. Again, it is the practice center of innovation and entrepreneurship education. Through the setting of teaching situations such as simulation experiment, simulation training and simulation practice, the teaching form, teaching methods, teaching modules and teaching assessment methods are continuously innovated, and the effectiveness of innovation and entrepreneurship education is comprehensively improved.

(2) Improve the Faculty

In the absence of problems in the process of the creation of the entity and the transformation of the creator, it is only necessary to have modern technology and modern faculty, and the innovation and entrepreneurship education of the university can be sustainable. Therefore, perfecting the faculty is imminent and should be carried out from two interfaces: on the one hand, we must improve the structure of the faculty. It is necessary not only to encourage teachers from different professional disciplines in the school to join their questions, but also to realize the complementary advantages of the teachers in the school. It is also necessary to start the “high-level grafting” plan according to the actual situation of the teachers in the school, to strengthen the problems of the school, the school research, and the

school-enterprise. Asked about the flow of teachers, attracting more high-end teachers to enter the education sector of the school. On the other hand, we must improve the quality of the teaching staff. In addition to the general knowledge and skills of innovation and entrepreneurship education, every innovative entrepreneurial teacher needs to have the vision of “seeing the future trend of innovation and entrepreneurship” and the thinking of “integration, financing, integration, integration, and wisdom”. The ability of “four or two to solve problems”, “helping students to get out of the entrepreneurial dilemma”, “the way to discover and explore potential business opportunities in time”, and so on, the quality of “creative faculty” to meet the requirements of innovation and entrepreneurship development in colleges and universities.

4. Conclusion

In summary, under the implementation of the innovation-driven development strategy in China, the era of “mass entrepreneurship, innovation” has brought the society to face new development opportunities. In the 21st century, college students can only adapt to the development of society if they strive to improve their ability to innovate.

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