

Original Research Article

The Construction of College Students' Innovation and Entrepreneurship Ability Cultivation Ecosystem from the Perspective of Maker Culture

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Abstract: The development and training of innovative and entrepreneurial talents is the basic support for enhancing the national core competitiveness, and the training of innovative and entrepreneurial talents has become an important mission of higher education. From the perspective of maker culture, the cultivation of college students' innovation and entrepreneurship ability has the dilemma of deviation of educational concept, weakened educational carrier, and inefficient evaluation of quality. To this end, build an information network, innovate the education system, and create a cultivation ecology of educational atmosphere, in order to cultivate more campus makers.

Keywords: Maker culture; College students; Innovation and entrepreneurship

1. Introduction

The development and training of innovative and entrepreneurial talents is the basic support for enhancing the core competitiveness of the country, and the training of innovative and entrepreneurial talents has become an important mission of higher education. The concept of "innovation and entrepreneurship education" gradually entered people's field of vision and developed rapidly ^[1], giving birth to a new concept of "maker" education. "Maker" refers to people who are willing to practice and share, and strive to turn various ideas into reality person ^[2]. Maker education is the need to promote the comprehensive reform of higher education and improve the quality of personnel training.

2. Cultivation of innovation and entrepreneurship ability of college students from the perspective of maker culture

2.1 Change the concept of education and strengthen the practice of education

Maker education is generated in the spiral innovation and development of knowledge and technology integration, and its educational concept is "learning by doing" and "open sharing". First, the traditional "knowledge-oriented" student cultivation concept has gradually changed into a "application-oriented, innovative" cultivation concept and education orientation; Become the main force of innovation and entrepreneurship; once again, the traditional "case education" is transformed into "practical education", which discovers and solves problems on the basis of project practice, and "purposely" enhances students' innovative awareness and creativity.

2.2 Expand educational carriers and build an educational ecology

The carrier of innovation and entrepreneurship integration in colleges and universities is no longer limited to the teaching of innovation and entrepreneurship courses, but explores the construction of innovation and entrepreneurship education ecology. The first is to integrate the cultivation of innovation consciousness into the teaching curriculum, integrate the improvement of entrepreneurial ability into professional learning, and set up basic courses, compulsory courses, elective courses, training lectures, popular science publicity and other links in the construction of the curriculum system. The second is to actively organize competition activities, product demonstrations, and establish practice places such as college students' entrepreneurial incubation bases or maker spaces on campus, and provide a platform for innovation and entrepreneurship practice, so that college students can transform the innovation and entrepreneurship awareness in their minds into product thinking, and continue to strengthen through practice. Innovation and entrepreneurship ability.

3. The current situation of innovation and entrepreneurship training of college students from the perspective of maker culture

3.1 Deviation of educational concept and insufficient participation of students

Nowadays, innovation and entrepreneurship education in colleges and universities is in full swing, but the educational concepts and supporting conditions of some colleges and universities have not been updated in time. Although entrepreneurial incubation bases,

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maker spaces and other practice places are generally established, maker training camps and maker education laboratories are also carried out. Maker cultivation projects, but there are still outstanding problems such as management of innovation and entrepreneurship education and indexing of results. Innovation and entrepreneurship education fails to start from a student-oriented perspective, and fails to listen to and identify the needs of students for innovation and entrepreneurship. The innovation and entrepreneurship management department Situations where students are reluctant to actively engage in a positive and enthusiastic approach.

3.2 The quality evaluation is inefficient, and the college system is not very motivating

At present, various colleges and universities are vigorously promoting comprehensive quality evaluation, and have introduced relevant comprehensive evaluation systems, including evaluation indicators such as ideological and moral cultivation, cultural and sports cultivation, social practice, volunteer service, academic technology, innovation and entrepreneurship, especially the addition of innovation and entrepreneurship compulsory credits, Elective credits and credits for the second classroom activity of innovation and entrepreneurship, but they did not serve the purpose of cultivating campus makers in the actual operation process, and were slightly inefficient in the incentive mechanism. The lack of an effective innovation and entrepreneurship quality evaluation system leads to students still being confined to course study and activity participation, which restricts the cultivation of college students' maker spirit and maker projects.

4. Construction of an ecosystem for the cultivation of college students' innovation and entrepreneurship ability from the perspective of maker culture

4.1 Establish an information network to effectively identify student needs

With the rapid development of information technology of "big wisdom and cloud", the use of big data analysis technology to grasp the needs of college students' innovation and entrepreneurship is the only way to break the information island of colleges and universities. From the perspective of maker education, firstly, a student-oriented innovation and entrepreneurship education needs identification network is established in big data analysis, and students' needs for innovation and entrepreneurship education are classified, accurately and effectively identified and multi-dimensionally integrated, so as to provide a basis for the follow-up. Workready big data foundation. Secondly, focus on distinguishing the general needs and specific needs of students, and effectively solve the different needs of students in different grades and stages, from innovation and entrepreneurship awareness of innovation and entrepreneurship, so that students in A virtuous circle is formed in the process of innovation and entrepreneurship education.

4.2 Innovate the education system and coordinate the management of educational resources

In order to achieve the goal of maker education, colleges and universities must innovate the existing education system, starting from the top level of system formulation, starting from the transformation of educational concepts, and starting from the differentiated needs of students, and continue to strengthen the construction and improvement of educational carriers and evaluation systems. First, from the top-level perspective of system formulation, innovation and entrepreneurship education should be considered in the talent training system in the form of special work, so as to form a strong synergy among the scattered forces on the campus. The second is to improve the workload verification system for innovation and entrepreneurship instructors and the innovation and entrepreneurship instructors. The fourth is to explore the efficient use and management mode of college students' innovation and entrepreneurship places. The fourth is to try hierarchical and classified innovation and entrepreneurship education and its evaluation methods.

4.3 Create a cultural atmosphere and build a campus maker ecology

The improvement of the soft indicators of campus maker culture atmosphere has a crucial impact on the quality of innovation and entrepreneurship education in colleges and universities. Creating an educational atmosphere is naturally inseparable from the "intermediate sticky organization" that connects colleges and students with each other. Through horizontal and vertical information and resource links, it helps college students break the shackles of discipline and major. First of all, the school-level student organization takes the innovation and entrepreneurship education needs of college students of all grades as the starting point, and extensively organizes innovation and entrepreneurship exchanges and practical activities. Secondly, the innovation and entrepreneurship student associations undertake innovation and entrepreneurship activities with high student attention and participation rate, and carry out the propaganda of maker culture around the students.

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