Reflection and Model Construction of University Innovation and Entrepreneurship Education Based on Collaborative Training

Sisi Wang, Jianan Chen, Weidong Xu

College of Beijing Information Science and Technology University, Beijing 100192, China.

Abstract

Innovative education is the trend and direction of higher education reform at present, and it is also an important driving force to promote national development and social progress. With the development of the society, the number and scale of Chinese universities are gradually increasing, and the number of college students and graduates is obviously increasing. Under the background of the continuous reform and deepening of China's education system, the construction of university enterprise education ecosystem has become an important topic for relevant scholars to study. Chinese universities put forward enterprise education, aiming at enhancing students' entrepreneurial ability, encouraging students to start businesses actively and providing guarantee for universities to cultivate more high-quality comprehensive talents. Based on the current situation of collaborative training of innovative and entrepreneurial talents, this paper reflects on the problems and tries to construct an intermediary transformation strategy, in order to promote the collaborative training of innovative and entrepreneurial talents to achieve better results.

Keywords

Innovation and entrepreneurship, Synergistic cultivation, Comprehensive talents.

1. Introduction

Enterprise education not only helps to promote the innovation of higher education ideas and paradigms, but also promotes the improvement of economic quality and efficiency through continuous innovation. It is an important breakthrough in the comprehensive reform of Education under the new normal [1]. University Enterprise education can help students realize the transformation from job selection and employment to innovation and entrepreneurship. With the increasing attention of the state and government departments to enterprise education, the education department has gradually increased the corresponding support [2]. Under the background of the era of mass entrepreneurship and innovation, and under the call of the era of integration of industry and education and collaborative training, universities closely follow the development requirements of the times and walk out of their own path on the road of innovation and Entrepreneurship Education [3]. Due to the late development of enterprise education in Chinese universities, there are still many disputes on the theoretical research of enterprise education, resulting in the current construction of university education system is not perfect and a complete education chain has not been formed [4]. As an important way to cultivate new talents in China, enterprise education plays an indispensable role in improving talent competitiveness and cultivating students' innovative spirit and practical ability. Therefore, Chinese universities must pay more attention to enterprise education, actively cultivate students' innovation ability, and encourage students to choose innovation independently, so as to achieve the effect of entrepreneurship driving employment [5].

In order to keep up with the social needs of China's rapid development, universities continue to optimize the process of training innovative and entrepreneurial talents. Although some progress has been made, it is still difficult to meet the huge social demand for innovative and entrepreneurial talents [6]. By combing the development memorabilia of entrepreneurship education in China, we can see that entrepreneurship education started first, then integrated because it is consistent with innovation education, and moved towards the talent training path of collaborative participation of multiple subjects by expanding the participants. The traditional enterprise education concept and education

model can not meet the needs of the current society. In order to meet the needs of economic development, the construction of university enterprise education ecosystem based on collaborative training has become a university scholar and practitioner. Because the talent training direction of the university is not guided by the direct needs of social enterprises, graduates may be disconnected when entering the society [7]. How to cultivate innovative and entrepreneurial talents in line with the needs of the current new era is an urgent problem for universities in talent training. Based on the current situation of collaborative training of innovative and entrepreneurial talents, this paper reflects on the problems and tries to build an intermediary transformation strategy in order to promote the collaborative training of innovative and entrepreneurial talents and achieve better results.

2. Connotation of collaborative training of innovative and entrepreneurial talents

2.1 Concept of collaborative training of innovative and entrepreneurial talents

Collaboration refers to the process of achieving an orderly structure, communication and cooperation between systems and elements, between elements and elements, and between the internal and external environment of the system, so as to finally create the effects and values that can not be achieved by the simple summary of the original scattered individuals. The value of enterprise education in the current society can not be ignored. The essence of its education is to improve students' innovative spirit and ability, provide more high-quality talents for national development, and lay a good foundation for the development of China's future education [8]. In order to ensure the supply of highquality and sufficient innovation and entrepreneurship talents, the Ministry of education puts forward the requirements that universities vigorously promote enterprise education, face all students and integrate enterprise education into the whole process of talent training. Under the guidance of macro policies, in addition to deepening teaching reform, improving the fit between talent training and social needs, and the needs of students' all-round development, it is inevitable to strengthen the cultivation of innovative and entrepreneurial talents in universities. Synergy means that multiple subjects and multiple elements are systematically regulated based on the achievement of a common goal. Specifically, the collaborative training of university innovative and entrepreneurial talents refers to the process in which universities, enterprises and the government take the training of innovative and entrepreneurial talents as the common goal, share resources, and effectively interact and produce synergy under the interaction of various elements of the system, so as to enhance the effect of university education.

Universities do not have all the resource advantages required to carry out the above training of innovative and entrepreneurial talents. Many resource advantages are in the government, industry associations and enterprises [9]. Therefore, the diversified collaborative training mode of innovative and entrepreneurial talents in universities has been gradually recognized by all parties, and universities have also begun to explore the diversified collaborative training mode. The various elements involved in the collaborative training of innovative and entrepreneurial talents have their own unique roles. Because of the common educational objectives, they constitute a system. Through the benign interaction between the elements in the system, each system will play a greater role, and the system integration will play a more powerful role to achieve the goal of enhancing the effect. Collaborative training emphasizes the correlation and collaborative symbiosis among various elements. In the construction of innovative and entrepreneurial talent training mechanism, we adhere to the consistency of objectives and gather training forces.

2.2 Characteristics of collaborative training of innovative and entrepreneurial talents

When some universities carry out enterprise education, their understanding of innovation and entrepreneurship is not deep enough. The focus of education is on professional courses and personnel training in schools, ignoring the importance of innovation and entrepreneurship courses, and failing to combine professional education, quality education and enterprise education. Some universities think that enterprise education teaches methods and skills of innovation and entrepreneurship, while

ignoring the cultivation of students' innovation and entrepreneurship ability. The construction of university enterprise education ecosystem based on collaborative training refers to the mobilization of social organizations and the public to participate in the enterprise education ecosystem in the management activities of specialized institutions, emphasizing that university education should take the construction of collaborative innovation center as the carrier, and strengthen the engineering ability and innovation ability as the training goal, so as to achieve the purpose of improving the overall level of higher education and the quality of education [10]. The process of cultivating innovative and entrepreneurial talents is an open process involving many elements, such as various educational and teaching resources of universities, various platforms of enterprises, government policies and funds, etc. These elements originally played an independent, closed and decentralized role. Training requires each element to get rid of the isolated and scattered situation, take cooperation and win-win as the common value pursuit, devote itself to eliminating barriers, breaking barriers between elements, realizing efficient integration of resources, and exploring the establishment of a long-term mechanism of resource sharing, complementary advantages and common development. The positive entrepreneurial psychological education can improve the entrepreneurial psychological quality of college students as shown in Figure 1.

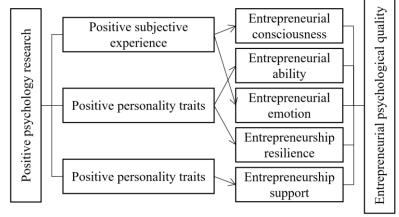


Figure 1 The effect of active entrepreneurial psychological education on the improvement of college students' entrepreneurial psychological quality

In essence, the construction of university enterprise education ecosystem based on collaborative training is a new collaborative education mechanism in which universities and social organizations, scientific research institutions, industrial enterprises and other relevant departments jointly formulate training objectives, jointly design curriculum systems, jointly set up teaching teams and strengthen cooperation. It can be said that this is a kind of cooperation. For this kind of cooperative relationship, it is intended for the interaction of multiple subjects in order to achieve the training goal. As the interactive cooperation among multiple subjects around collaborative education, the most important feature of enterprise education ecosystem is the diversity of participants. Universities should combine their own professional advantages, strengthen in-depth cooperation with enterprises, and train students' innovative and entrepreneurial abilities by completing scientific research projects. The cultivation of innovative talents needs the participation and cooperation of multiple subjects. The advantages of government's policy orientation, university's educational expertise, and enterprise's technology integration can be released through the cooperative system. This promotes the elements to produce new qualitative changes on the basis of the original specific structure, function and action mode, improves the utilization rate and benefit of their respective resources, stimulates and integrates the vitality of relevant elements, resonates at the same frequency in the interaction, forms the amplification effect, realizes the superposition of effects, and thus creates greater value.

3. Build a collaborative training mechanism system for innovation and Entrepreneurship

3.1 Deeply participate in the training process

Innovative talents often have strong ability to discover, analyze and solve problems, and can improve themselves through continuous learning. After the students have started innovation and entrepreneurship activities, let the entrepreneurial instructors with high literacy and ability and certain innovation and entrepreneurship experience provide targeted guidance and suggestions for the students; Finally, class counselors or academic staff should serve as management instructors to ensure the coordinated development of education and practice. In order to ensure the implementation of the collaborative mechanism, universities, enterprises and governments should establish three-party mixed entities, such as entrepreneurship colleges and collaborative centers of some universities in China. The entity is composed of relevant personnel from universities, enterprises and government, and plans the major issues related to the cultivation of college students' innovative and entrepreneurial abilities in a unified way, so as to improve the scientific level of decision-making. Members should actively promote the performance of their own obligations in operating entities to improve the effectiveness of collaboration. For students with entrepreneurial intention, they can use limited elective courses, elective courses or amateur specialized courses to carry out systematic entrepreneurship training, and at the later stage of university stage, they can embed technical entrepreneurship content into the professional curriculum system. In terms of teaching methods, the popularization course of innovation and entrepreneurship awareness for all students should adopt the way of large courses to improve the popularization rate, supplemented by extracurricular assignments, group discussions and other individual or group studies to ensure certain effects.

3.2 Sharing educational and teaching resources

Innovative education needs to be closely integrated with professional courses, go deep into the whole process of university personnel training, and not only exist independently as a public course. Through enterprise education, we can cultivate students' innovative consciousness and ability, and enhance their core competitiveness in active employment. Universities can adapt the actual innovation cases of enterprises into teaching projects, design innovation and entrepreneurship courses according to the professional characteristics of secondary colleges, and establish practical platforms such as entrepreneurship colleges, training bases, incubators and Industry-University-Research centers to meet the diversified innovation and entrepreneurship practice needs of students. Curriculum is the basic carrier of enterprise education in universities, and classroom is the main position of talent training. The greatest advantage of curriculum lies in building a relatively complete knowledge system. On the one hand, universities should carry out general enterprise education for all students to improve their innovative consciousness and entrepreneurial spirit; on the other hand, they should carry out targeted entrepreneurship education for students with entrepreneurial aspirations. Universities should also promote the organic integration of professional education and enterprise education, and optimize the content of professional courses. In order to maintain the sustained and healthy development of operational entities, it is necessary to establish a restraint mechanism. In the top-level design of the collaborative education mechanism, it is necessary to establish a perfect restraint system or reward and punishment system, clarify the responsibilities of the main parties in the collaborative training of college students' innovative and entrepreneurial abilities, and eliminate the differences among the parties in terms of division of labor and cooperation, evaluation and sharing of achievements to the greatest extent, so as to achieve mutual benefit and win-win results.

3.3 Discipline and specialty integration construction

Generally speaking, scientific research institutions and educational institutions have rich theoretical research resources. Using the research resources of surrounding institutions through strategic cooperation can enhance their own theoretical research level, and then enhance their own enterprise education guidance and service level through high-quality theoretical output. The university needs to actively implement the ideas and measures in the policy, constantly reform its enterprise education

system with the help of the support policies of local governments for innovation and entrepreneurship projects, and improve the quality of education by making full use of policies and measures. For the cultivation of innovative and entrepreneurial talents, it is particularly important to guide college students to form the consciousness of innovation and entrepreneurship through conscious and systematic training. The collaborative training of innovative and entrepreneurial talents in universities should pay attention to the guidance of ideas and increase the theoretical education of enterprise education. First, we should cooperate within the University, integrate the teachers of different disciplines required for innovation and entrepreneurship, and expand the source of teachers through inter university cooperation. On this basis, universities should also strengthen training, send instructors to enterprises to cultivate engineering practice ability and encourage entrepreneurship practice, so as to improve the practical perception of "academic" teachers' innovation and entrepreneurship. Under the guidance of the education department, many local universities and highend enterprises and institutions set up a university innovation and Entrepreneurship Education Alliance to make use of the advantages of pooling funds, teachers and information, and help college students realize the successful connection between projects and investment and promote the development of university employment and entrepreneurship education by giving full play to the long-term and stable interactive relationship between industry alliance organizations.

4. Conclusions

Discipline development and specialty construction are two aspects that Chinese universities attach most importance to at present, and there is a complementary and interdependent relationship. Universities, enterprises and governments form an educational community through a cooperative mechanism, and regard the cultivation of innovative and entrepreneurial talents as their common value pursuit and action philosophy, which is conducive to giving full play to the resource advantages of all educational subjects, activating existing resources and amplifying resource efficiency. At present, there are controversies about whether to promote enterprise education in an all-round way and the educational methods adopted. It is necessary to give attention to both quality-oriented and professional enterprise education, as well as the educational needs of all students and individual students, so as to form an educational philosophy of initiative, transcendence and transformation. In order to improve the quality of enterprise education in universities, it is necessary to adopt the strategy of collaborative education between universities and government, build an educational platform in universities, set up industry alliance organizations, and implement collaborative education by attracting enterprises into universities. To rectify the deficiencies in enterprise education of various departments within universities. For other units, especially enterprises, if they can't be rectified, they should terminate their cooperation with enterprises according to relevant agreements.

References

- [1] Zhang Yongsheng. Reflection and model construction of new entrepreneurship education [J]. Comparative Research on Cultural Innovation, 2019, 000(008): P.89-90.
- [2] Tan Zhenghang, Yin Shanshan. On the construction of a school-enterprise collaborative training mechanism for postgraduates' innovation and entrepreneurship capabilities in local universities[J]. Journal of Nanchang Normal University, 2017, 38(002):71-74.
- [3] Zhang Yinghong, Chen Hucheng, Li Cailin, et al. Exploration and practice of diversified collaborative training to enhance students' innovation and entrepreneurship ability[J]. Education Modernization, 2019, 6(79):48-50.
- [4] Chen Heng. A preliminary study on the reform of enterprise education in universities under the platform mechanism of "collaborative education" [J]. Education Modernization, 2017, 000(001): 28-30.

- [5] Zhang Zhengyu. Strategies and reflections on enterprise education for college students in higher vocational colleges[J]. Journal of Yangtze River Engineering Vocational College, 2020, 141(01):28-31.
- [6] Wang Linlin. Rethinking and model construction of enterprise education for college students[J]. Economist, 2018, 02(348): 42-43.
- [7] Gao Shuncheng, Guan Rongwei, Li Yufen. Discussion on the Cultivation of Innovation Ability in Applied Undergraduate Entrepreneurship Teaching[J]. Journal of Henan College of Commerce, 2019, 176(003): 76-80.
- [8] Sheng Lisha, Cheng Wangbin, Tao Yuejin, et al. Collaborative education of enterprise education and ideological and political education in universities in the new era[J]. Youth and Society, 2020(4):147-148.
- [9] Shi Xianrui, Chen Shuliang, Tian Kun. The application-oriented talent training model of the deep integration of enterprise education and professional education [J]. Contemporary Educational Practice and Teaching Research, 2017(05):118-119.
- [10] Chai Run. Analysis on the basic content construction of college students' enterprise education[J]. Chinese and Foreign Corporate Culture, 2020, 612(11):144-145.