

Summary of Research on Innovation and Entrepreneurship Education Based on OBE Concept

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Abstract: Under the background of social transformation and rapid economic development, the requirements of all walks of life for compound and innovative talents are constantly increasing, which means that the innovative education model of colleges and universities needs to adapt to the needs of the times and make comprehensive and diversified changes. How to organically integrate professional education with innovation and entrepreneurship education has become an important topic of modern and contemporary college education model innovation. In this paper, the related research literature is sorted out in order to supplement and enrich the literature review research in this field, and the deep integration research of professional education and the cultivation of students' innovation and entrepreneurship ability based on OBE education concept is constructed, which provides a practical basis for the enrichment of this theory.

1. Introduction

Premier Li Keqiang's important instructions emphasize the integration of innovation and entrepreneurship education into talent training. College students are the main group of innovation and entrepreneurship, and they should not only learn professional knowledge, but also cultivate innovation and entrepreneurship and practical ability. In the "Implementation Opinions of the General Office of the State Council on Deepening the Reform of Innovation and Entrepreneurship Education in Colleges and Universities", it is proposed that colleges and universities should appropriately add and offer relevant courses to cultivate innovation and entrepreneurship ability in the professional talent training program. Through the study, practice and training of this course, students can understand relevant policies and encourage college students to start their own businesses. The combination of innovation and entrepreneurship education and professional education is an important measure to build an innovative country. Innovation and entrepreneurship education in colleges and universities can cultivate students' innovative spirit and practical ability, and solve the employment problem of college graduates through entrepreneurship. In order to respond to the call of the state, while doing a good job in professional education, we must do a good job in innovation and entrepreneurship education in colleges and universities based on learning output, comprehensively promote and deepen the comprehensive reform of higher education, and

cultivate students' innovative consciousness and practical ability. With China's economic development entering a new normal, it is urgent to build an innovative country and a powerful country in human resources. The core problem is to cultivate a large number of innovative talents. At present, scholars have conducted in-depth research on innovation and entrepreneurship education in colleges and universities at home and abroad, and put forward some practical and feasible countermeasures from the practical difficulties and problems in innovation and entrepreneurship education in China, with a view to promoting the development of innovation and entrepreneurship education for college students in China. How to adjust the organic integration of professional education and innovative education in the new era has become an important topic of modern and contemporary university education model innovation. In this paper, the related research literature has been sorted out, and the deep integration research of professional education and the cultivation of students' innovative and entrepreneurial ability based on the OBE educational concept has been constructed, which provides a practical basis for the enrichment of this theory.

The 18th National Congress of the Communist Party of China put forward the "innovation-driven development strategy", which made innovation and entrepreneurship education a national strategy. Implementing innovation and entrepreneurship education to strengthen the cultivation of talents with entrepreneurial spirit and entrepreneurial ability is not only to optimize the allocation of human resources, relieve social employment pressure and promote social and economic development, but also an urgent requirement for deepening higher education reform under the background of building an innovative country. There are more than 4,000 articles on "Innovation and Entrepreneurship Education" by domestic scholars in CNKI system, which has been increasing year by year since 2001, including more than 3,000 articles in recent three years. With the theme of "innovation and entrepreneurship education", advanced retrieval is conducted on CNKI. The high-frequency research topics involve entrepreneurship education, innovation and entrepreneurship education, innovation and entrepreneurship education based on OBE concept, personnel training system, curriculum system, entrepreneurship practice, professional education and entrepreneurship education, etc. Among them, by comparing and analyzing the related literatures such as "Professional Education and Entrepreneurship Education", "Innovation and Entrepreneurship Education" and "Innovation and Entrepreneurship Education Based on OBE Concept", scholars realize that "innovation and entrepreneurship" education is not only for students' entrepreneurship and employment, but more importantly, the educational value included in it, that is, cultivating students' innovative and entrepreneurial ability.

2. Research on the Problems and Countermeasures of Innovation and Entrepreneurship Education in Domestic Universities

At present, how to develop innovation and entrepreneurship education in colleges and universities in China is a topic that many domestic scholars are studying and discussing. Academic research mainly focuses on the concept discussion, internal and external environment, teaching staff, curriculum system construction and operation mechanism, etc. Scholars such as Guo Wei think that improving the quality of dual-innovation education is the primary factor, and high-quality teachers are needed. However, the tendency of government special funds in ordinary universities is insufficient, which can not meet the needs of innovation and entrepreneurship education. They think that the reform of innovation and entrepreneurship education in colleges and universities is to deeply understand the concept of innovation and entrepreneurship education, make full use of existing and potential educational resources, give full play to their own advantages, and create an

innovation and entrepreneurship education road with the characteristics of colleges and universities (Guo Wei, Sun Haiyan, Han Shanshan, 2014). Scholars such as Lu Yuhong believe that the essence and core of entrepreneurship education is innovation education, which should be the training of creative thinking. However, many people have a wrong understanding of innovation and entrepreneurship education. They believe that innovation and entrepreneurship education is to cultivate entrepreneurial talents, that is, colleges and universities guide students to start businesses or companies or to carry out the second class (Lu Yuhong, Zhang Suhong, 2011). Scholar Shi Pingping believes that China's higher education is deeply influenced by traditional educational concepts, innovation and entrepreneurship education is still in the primary exploration stage, the innovation and entrepreneurship education system is imperfect, the teaching staff is still weak, the construction of entrepreneurship incubator is not practical and effective enough, and the innovation and entrepreneurship awareness of college students needs to be improved. The article points out that the effectiveness of innovation and entrepreneurship education for college students can be improved by improving the system of entrepreneurship education in colleges and universities, building a team of high-quality innovation and entrepreneurship teachers, establishing a scientific and feasible entrepreneurship incubation mechanism, and improving college students' awareness of innovation and entrepreneurship (Shi Pingping, 2016).

Different types of colleges and universities in China have differences in the types, levels, characteristics and values of running schools. Based on this, scholars have studied and explored the development path of innovation and entrepreneurship education that reflects the characteristics of colleges and universities. Scholar Wei Yinxia, etc. are studying the innovation and entrepreneurship education system of "three levels, four platforms and four guarantees" in local engineering colleges and universities, and put forward that the innovation and practice education for college students suitable for the characteristics of colleges and universities should be carried out in depth with the focus on the reform of curriculum teaching, the construction of practice platform as the core and the establishment of service guarantee system as the key, so as to infiltrate the cultivation of innovation and entrepreneurship ability into professional education and run through the whole process of engineering application talents cultivation (Wei Yinxia, 2015). Scholars such as Zhang Suhong studied the innovation and entrepreneurship education of Jinling Institute of Technology, and proposed that the innovation and entrepreneurship education system of new application-oriented undergraduate colleges should focus on the basic mode of talent training, integrate innovation and entrepreneurship education into professional education, constantly improve the curriculum system construction, focus on students with entrepreneurial intentions or entrepreneurial enthusiasm, and better implement it by creating various practical platforms (Zhang Suhong, 2012).

2.1 Countermeasure research on Deep Integration of Professional Education and Students' Innovation and Entrepreneurship Ability Based on OBE Education Concept

2.1.1 OBE Concept

OBE(Outcomes-based Education) is an education model based on learning output. Although there are many different explanations, the core idea is the same. Teachers need to build training mode, formulate teaching syllabus, refine teaching content and reform teaching methods and means according to the knowledge that students should master when they graduate, the ability they have achieved, their level and their innovative and entrepreneurial ability. Teachers can't teach according to textbooks or teachers' experience. They need to decide what teachers should teach according to what students should achieve, and change from teacher-centered to student-centered. Gao Meirong,

a scholar, proposed to improve students' ability of innovation and entrepreneurship by analyzing what knowledge they need to acquire, and to build a curriculum teaching system based on OBE concept that deeply integrates students' ability of innovation and entrepreneurship (Gao Meirong, 2021).

2.1.2 Construction of Curriculum Teaching System Based on Obe Education Concept

Results-oriented, according to the professional training plan, the training objectives are determined, and the teaching syllabus of innovation and entrepreneurship course is formulated.

Results-oriented, making syllabus and refining teaching objectives by evaluating students' abilities. In OBE educational philosophy, we emphasize what professional knowledge we want students to acquire and what abilities they have achieved when they graduate. Results-oriented, according to the professional training plan, the training objectives are determined, and the teaching syllabus of innovation and entrepreneurship course is formulated. Du Junyi and other scholars put forward that social needs, students' professional knowledge and innovative and entrepreneurial ability should be clearly defined in teaching objectives (Du Junyi, Feng Gang, 2019). We should take into account the individual differences between students. Focusing on a clear teaching goal, taking "thick foundation, wide caliber and strong ability" as the training goal. In the formulation of the syllabus, theory should be combined with practice. By offering theoretical explanation and case analysis in the course of innovation and entrepreneurship, students can have a more comprehensive understanding of innovation and entrepreneurship and establish their awareness of innovation and entrepreneurship. Practice courses for students' innovation and entrepreneurship are offered, the college provides a platform for students' innovation and entrepreneurship activities, professional teachers provide guidance, and students carry out related activities by forming innovation and entrepreneurship teams to cultivate students' innovative spirit and improve their innovative and entrepreneurial ability.

2.2 Take Innovation as the Goal, Optimize the Teaching Content and Design the Teaching Process According to Students' Needs

With innovation as the goal, under the guidance of OBE concept, according to the type of "learning output" and students' development as the direction, we should emphasize "what knowledge can students learn after learning", and what is the learning experience in the learning process? Have you achieved the exploration of subjective initiative and potential? Analyze the teaching emphases and difficulties of the course and optimize the teaching content. When designing teaching, teachers can mobilize students to actively participate in the teaching process. Teachers can effectively help students achieve these learning outcomes and achieve "learning output" by adopting diversified teaching methods and means. Scholar Wang Gaoyuan proposed that in the teaching process, aiming at innovation, by actively introducing various teaching methods and means, cutting-edge knowledge and the latest scientific research achievements in this field can be introduced into classroom teaching, so as to enhance students' interest in scientific research and further improve their enthusiasm and enthusiasm for participating in innovation and entrepreneurship (Wang Gaoyuan, 2019).

2.3 Ability-Oriented, Follow the Development of Students' Personality And Improve the Teaching Assessment Methods

In order to accurately detect the learning achievement, we can't just rely on the traditional examination paper to assess the course. The examination paper can't fully show students' innovative and entrepreneurial ability, so we should adopt various assessment methods and evaluation standards.

2.4 Construction of Teaching Evaluation and Supervision Mechanism Based on Learning Outcomes

Through the construction and continuous improvement of specialized courses and innovation and entrepreneurship courses, the teaching quality can be improved, and at the same time, the teaching evaluation and supervision mechanism based on learning outcomes must be continuously improved.

3. Conclusion

Generally speaking, at present, the academic circles generally believe that the core problem of "innovation and entrepreneurship" education in colleges and universities is the neglect of personnel training, and the fact that "innovation and entrepreneurship" education has not really been brought into the education system in colleges and universities. No matter the noumenon education concept, cultural genes, curriculum and teaching, or the support of teachers, funds, enterprises and the government, it is in a state of absence. To solve these problems, the first thing we need to do is change the educational concept, truly understand the significance of "innovation and entrepreneurship" education, and effectively integrate entrepreneurship education with professional education based on OBE educational concept.

Introduce the OBE education concept into the innovation and entrepreneurship course, determine the training objectives and formulate the teaching syllabus according to the students' development, which is result-oriented. Taking innovation as the goal, taking students as the center in the teaching process, paying attention to the needs of all students, consolidating the basic education of innovation and entrepreneurship, emphasizing "what are the learning achievements we want students to achieve", optimizing the teaching content and designing the teaching process. Ability-oriented, setting up various teaching methods and means and various assessment methods according to students' needs. Focus on the development of students, constantly reflect on the teaching process, and build a teaching evaluation and supervision mechanism based on learning outcomes through continuous improvement to further improve the teaching quality.

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References

- [1] Zheng Libo(2019). *Exploration on the Teaching Mode of College Students' Innovation and Entrepreneurship Course Based on OBE Educational Concept*. *Journal of Qiqihar University (Philosophy and Social Sciences Edition)*, 01,186-188.
- [2] Guo Wei, Sun Haiyan, Han Shanshan(2014). *Analysis and Countermeasures of Innovation and Entrepreneurship Education in Colleges and Universities*. *Heilongjiang Education*, 2.
- [3] Lu Yuhong, &Zhang Suhong(2011). *Analysis of the Relationship between Entrepreneurship Education and Innovation Education for College Students*. *Jiangsu Higher Education*, 6.
- [4] Shi Pingping (2016). *Problems and Countermeasures of Innovation and Entrepreneurship Education for College Students*. *Education and occupation*, 12.
- [5] Zhang Suhong, Chen Xiaohu, Lu Yuhong (2012). *Construction of Innovation And Entrepreneurship Education System In New Application-Oriented Universities-Taking Jinling Institute of Technology as an Example*. *Journal of Jinling Institute of Technology*, 12.
- [6] Wei Yinxia, Huang Ke, Guo Qing (2015). *Research and practice of innovation and entrepreneurship education system in local engineering colleges*. *Experimental Technology and Management*, 2.
- [7] Gao Meirong(2021). *Research on deep integration of electronic information specialty education and innovation and entrepreneurship training based on OBE concept*. *Electronic Components and Information Technology*, 5(10), 138-139.
- [8] Du Junyi, &Feng Gang(2019). *Research on the cultivation of college students' innovative and entrepreneurial ability based on OBE concept*. *Business News*, 26,184-185.
- [9] Wang Gaoyuan(2019). *Yu OBE's thinking on the path of cultivating students' innovation and entrepreneurship ability in application-oriented universities*. *modern business trade industry*, 30,73-74
- [10] Chen Xi(2010). *Innovation and entrepreneurship education runs through the whole process of talent training in colleges and universities*. *Higher Education in China*, 12, 46.
- [11] Wang Hongcai, &Liu Junying(2017). *Core, difficulties and breakthroughs of universities innovation and entrepreneurship education*. *China Higher Education*, 2,61–63.
- [12] Li Yayuan(2016). *Innovation and entrepreneurship education: connotation explanation and research prospect*. *Ideological & Theoretical Education*, 4, 83–87.
- [13] ZHANG Yan(2010). *Concept Analysis and Strategic Thinking Of Innovation And Entrepreneurship Education In Colleges And Universities*. *China Higher Education*, 23,45–46.
- [14] Zhang Bing, &Bai Hua. *Analysis of the concept of “innovation and entrepreneurship education in colleges and universities”*. *Higher Education Exploration*, 3,48–52.
- [15] Xu Huaping(2004). *On entrepreneurship education in Chinese universities*. *Research on Chinese higher education*,2, 74–75.
- [16] Liu Chunxiang, &Liu Jiajun. *Research on the evolution and implementation of innovative entrepreneurship education policy*. *University Education Science*, 24, 94–100, 126.

- [17] Ren Shenghong, & Liu Sunyuan (2018). *The evolution logic and prospects of innovation and entrepreneurship education policy in colleges and universities*. *Educational Research*, 39(5), 59–62.
- [18] Mei Weihui, & Meng Ying (2016). *Innovative entrepreneurship education in Chinese universities: The role positioning of the government, the university and the society and their action strategies*. *Journal of Higher Education*, 37(8), 9–15.
- [19] Yan Jianhua, & Jang (2016). *Constructing the education of “entrepreneurship based on innovation”*. *China Higher Education*, 12, 53–56.
- [20] Huang Zhaoxin, Zeng Jirui, Zeng Erlei (2013). *Research and practice of post-oriented talent cultivating system—Based on the case study of Wenzhou University*. *Educational Research*, 34(6), 144–149.
- [21] Li Jiahua, & Lu Xudong (2010). *Integrating innovation and entrepreneurship education into the talent training system of colleges and universities*. *China Higher Education*, 12, 9–11.
- [22] Zhang Xiaojuan (2018). *Problems and path choice of innovation and entrepreneurship education in colleges and universities*. *Chinese University Science & Technology*, 4, 95–96.
- [23] Wang Yanxin (2015). *Reflection and model construction of innovation and entrepreneurship education in colleges and universities*. *China University Teaching*, 4, 4–7, 24.
- [24] Zhang Baojun (2017). *Reality reflection and coping strategies of innovation and entrepreneurship education in colleges and universities from the perspective of “Accurate Supply”*. *Journal of Higher Education Management*, 11(1), 33–39.