

Integration Research on Innovative Education for Entrepreneurship and Civil Engineering Major in Colleges and Universities

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Abstract: Under the background of information age and quality education, the society's demand for talents has gradually tended to be omnipotent and compound. On the one hand, it can promote talents to improve their abilities, on the other hand, it can also promote colleges and universities to cultivate more high-quality talents. Although most colleges and universities gradually attach importance to education reform, they are affected and constrained by many factors in the process of talent cultivation, resulting in many problems. Based on the environment of innovation and entrepreneurship education, this paper first analyses the current situation and characteristics of innovation and entrepreneurship education. It is found that there are many problems in the process of integration of double-innovation education and civil engineering specialty, such as insufficient understanding of educational concepts, lack of scientific curriculum planning, and the professional level of teachers need to be improved. And put forward a series of countermeasures, hoping to provide some reference for the integration of various specialties and innovation and entrepreneurship in the development process.

1. Research background

1.1 Literature review

Based on the thinking of the integration of civil engineering specialty and innovation and entrepreneurship in colleges and universities, and with the help of Zhang Yuxu's idea of the integration of civil engineering specialty education and innovation and entrepreneurship education, the problems existing between specialty and innovation and entrepreneurship and their solutions are discussed (Zhang, 2019). This paper discusses the changes made by colleges and universities in the integration of the two at present. Wan Zeqing and Zhu Weidong, through describing the knowledge of civil engineering specialty and innovation and entrepreneurship, discussed how to combine them organically, and put forward corresponding solutions to the related problems (Wan and Zhu, 2018). It also includes Wei Jinyang and Guan Rujun's research on the integration of civil engineering specialty and innovation and entrepreneurship education. It also introduces the problems faced by the integration of the two current and the countermeasures to solve them. It means that they are making more contributions to the cultivation of compound talents (Wei and Guan, 2018). And Li Long, Gao Junzhao and Li Juanfang have detailed explanations for the integration of innovation and entrepreneurship knowledge education and civil engineering specialty in the transformation and development of universities and put forward relevant guidance suggestions, as well as what problems will exist in the process (Li et al, 2018). Thus, it can provide a good reference for the improvement of teachers' creative ability and the strengthening of teaching time. It also provides a good experience for the transformation and development of engineering disciplines in Colleges and universities.

1.2 Purpose of research

With the rapid development of information age, quality education has gradually become the mainstream. In order to adapt to the current education model, most colleges and universities are

actively transforming, improving their teaching strength and reforming the education model. For this reason, colleges and universities actively integrate innovation and entrepreneurship education with other related specialties in order to cultivate more talents with innovation and entrepreneurship ability. Innovation and entrepreneurship education can better promote social development and provide more employment opportunities for graduates. Based on the specialty of civil engineering, through explaining the current situation and problems of innovation and entrepreneurship, and the countermeasures, the purpose of this paper is to better promote the organic integration of the two forms of education, and to provide a good reference for the transformation of universities or the development of multi-functional talents.

2. The current situation and characteristics of double creative education

Quality education has been gradually carried out in most junior and senior high schools, and students have more and more opportunities to choose the professional projects they are interested in. Some high school arts and sciences are no longer divided into subjects, according to classmates like the course, carry out large classroom teaching. Teachers don't go to a certain classroom regularly, but students begin to go to each classroom to take their favorite courses. In the information age, we have trained highly sophisticated, complex, innovative and entrepreneurial talents. Therefore, for colleges and universities, according to the wishes of students to choose their favorite courses, it is conducive to the cultivation of students'innovation and entrepreneurship ability.

Innovation and entrepreneurship education has been paid more attention in recent years. It is also an educational model that has been mentioned all the time(Yu and Bai,2018). The aim is to train students with the basic qualities of entrepreneurship and creative personality. As a practical education, innovative entrepreneurship education not only cultivates students'understanding of basic knowledge but also pays attention to improving the entrepreneurial consciousness, innovative spirit and innovative ability of talents. Therefore, the purpose of innovation and entrepreneurship education is to make talents face the whole society, that is, they can start their own businesses freely, and they can also enter the company to help provide innovative thinking, promote the development of the company and optimize its resources. Innovation education in Entrepreneurship and innovation attaches great importance to talents'initiative spirit, risk-taking spirit and Entrepreneurship ability, and other related skills. Therefore, the government encourages university talents to start their own businesses actively, and implement entrepreneurship to promote employment, which provides good opportunities for efficient graduates to get full employment. At the same time, it is an important strategic measure to promote the construction of an innovative country.

Nowadays, innovation and entrepreneurship education is one of the ways of strategic adjustment of economic structure and reform of higher education in the new era. Faced with the new situation of mass innovation and entrepreneurship, most universities have made outstanding achievements in talent training. But at present, the problem of bi-creative education is also beginning to be reflected. Firstly, it lies in theoretical knowledge. In the process of cultivating students, most colleges and universities emphasize theoretical knowledge and neglect the cultivation of students'innovative consciousness and spirit. This has led to the one-sided understanding of innovation and entrepreneurship education as pure quality education, which not only misunderstood the knowledge points emphasized by theoretical knowledge, but also deviated from the direction required by innovation and entrepreneurship education to a certain extent. Secondly, the object is not clear. Most of the talents trained in Colleges and universities are limited to students who have entrepreneurial experience, but neglect other students who have such ideas. Since colleges and universities advocate students'autonomous learning and cultivate their own interests, they should make students receive innovation and entrepreneurship education indiscriminately. The other is teachers. Although innovation and entrepreneurship education has been put forward for a long time, teachers are still relatively vacant in this regard. Most colleges and universities are only theoretical teachers, and relatively few teachers have the practical experience and entrepreneurial experience. This leads to students not being able to enjoy the experience and methods needed for future

entrepreneurship.

3. Problems existing in the integration of civil engineering major and double creative education in colleges and universities

3.1 Deficiencies in the cognition of educational ideas

At present, both professional education and innovative entrepreneurship education are separated in Colleges and universities. Most universities' innovation and entrepreneurship education exists independently and operates independently. At present, the universities that carry out innovation and entrepreneurship education have no deep understanding of the concept of double-innovation education, and some of them remain on the surface. For example, most people will think that innovation and entrepreneurship education is simply to start their own companies and so on, ignoring the organic combination of civil engineering and innovation and entrepreneurship. Moreover, most of the students majoring in civil engineering have a biased understanding of innovation and entrepreneurship education and think that the relationship with themselves is not too big. Similarly, most professional teachers also think that innovation and entrepreneurship education has less connection with professional courses, so teachers pay less attention to it, mostly simple teaching. In the end, students can not understand the correlation between innovation and entrepreneurship education and civil engineering specialty, which leads to poor integration, and it is impossible to mention training related talents.

3.2 Lack of scientific curriculum planning

First, due to cognitive bias, most colleges and universities lack reasonable arrangements in curriculum planning. On the one hand, there are fewer courses for innovation and entrepreneurship education, on the other hand, there are only theoretical courses, but there are no practical courses, so students get little. Secondly, most colleges and universities think that civil engineering specialty can not be linked with innovation and entrepreneurship education, resulting in the lack of updated textbooks, teaching content and theory can not keep up with the current development of the times. Thirdly, most of the teachers who teach innovation and entrepreneurship education courses are theoretical teachers, but lack entrepreneurial experience. Therefore, in the teaching process, teachers useless knowledge of innovation and entrepreneurship, and do not integrate the two well. Students are naturally not interested, which is not conducive to the cultivation of innovative entrepreneurs in China.

3.3 Professional level of teachers needs to be improved

At present, most of the teachers of Civil Engineering Specialty in universities are graduate students, or teachers with higher academic qualifications and rich engineering practice experience. But there are fewer omnipotent talents who have the knowledge and practice of innovation education for entrepreneurship. Therefore, most of the innovative entrepreneurship teachers in Colleges and universities are theoretical teachers, and half the way to learn relevant theoretical knowledge to teach. Therefore, in the course of teaching, the teachers of civil engineering specialty can not organically combine the knowledge of innovation and entrepreneurship, and the teachers of innovation and entrepreneurship do not understand civil engineering. Therefore, students are unable to integrate the two virtuously, which ultimately prevents them from becoming compound talents with professional knowledge and innovation and entrepreneurship knowledge.

3.4 Insufficient ability to integrate talents themselves

At present, most colleges and universities mostly set up civil engineering specialty, so a lot of talented people have been sent to the country. With the development of innovation and entrepreneurship education, many colleges and universities begin to cultivate professional-related integrated talents. As mentioned in the previous article, most of the professional course teachers in Colleges and universities do not have innovative knowledge, and there are fewer practical teachers, which leads to students can not organically integrate their professional course knowledge and

innovative entrepreneurship knowledge. In addition, some students know less about the theoretical knowledge of their own professional courses, and can not absorb the content of innovation and entrepreneurship knowledge. Therefore, in the process of sustainable development of innovation and entrepreneurship education, many colleges and universities are unable to provide innovative entrepreneurs who integrate the two organically.

4. Integration of civil engineering major and innovative education for entrepreneurship in colleges and universities

4.1 Creating a teaching system of “one lesson and two fusions”

For colleges and universities, the most important point is to integrate professional knowledge with innovation and entrepreneurship. Let students in the acceptance of this professional knowledge, but also for the understanding of innovation and entrepreneurship knowledge more thoroughly. For teachers, colleges and universities should actively introduce basic knowledge of their own specialty, but also have entrepreneurial experience. Or recruit teachers who have already succeeded in entrepreneurship, share entrepreneurial experience, and lead students to visit their own start-up companies to feel the charm of entrepreneurship on the spot. Therefore, building a system of integration of professional course knowledge and innovation and entrepreneurship knowledge is conducive to the promotion of students' interest, and can also deepen the understanding of the relationship between the two. For future civil engineering students, whether entrepreneurship or innovation can provide better help.

4.2 Improving teachers' dual professional teaching ability

At present, most colleges and universities are in urgent need of talents with dual abilities of civil engineering specialty and innovation and entrepreneurship knowledge. Firstly, colleges and universities should increase the training of teachers' innovation and entrepreneurship knowledge. Teachers should cultivate students with dual abilities of professional knowledge and innovation and entrepreneurship knowledge, and they should understand these two aspects. One is that the textbooks should be constantly updated, and the other is that the teachers' abilities should be constantly improved to enhance their skills in innovation and entrepreneurship. Teachers' level determines students' achievement to a certain extent. Secondly, it is to invite some well-known talents in innovation and entrepreneurship. It can not only help students to quickly get in touch with the charm of innovation, but also guide teachers on how to teach their students. In addition, universities can cooperate. Teachers with outstanding professional skills and innovative and entrepreneurial abilities in their respective universities are brought together to explore how to guide students to effectively integrate the two aspects. On the one hand, it improves the ability of teachers, on the other hand, it also provides reference for future teaching ideas.

4.3 Strengthen the practical teaching of courses

On the premise of learning the knowledge of innovation and entrepreneurship, one of the most important things for students majoring in civil engineering is to learn professional knowledge well. Therefore, in the implementation of innovation and entrepreneurship knowledge education, we should actively reform the practical teaching of professional knowledge. On the basis of learning theoretical knowledge, we should increase practical experience, integrate innovation and entrepreneurship knowledge, and guide students to develop in various directions. In addition, colleges and universities can organize competitions with relevant knowledge and abilities of innovation and entrepreneurship according to the actual situation. The aim is to increase students' mastery and application of the two knowledge.

4.4 Improving the comprehensive quality and integration of talents

Improving the comprehensive quality of talents can be embodied in the following aspects. First, the integrity of morality, intelligence, physical fitness, and beauty. As the goal of talent cultivation in the era, the most basic thing is to learn how to do a good job of oneself. Second, professional

knowledge is too hard. With the traditional virtues, we should pay attention to the construction of our knowledge and ability. To learn the knowledge of one's own major well will have a good extension and absorption for learning any relevant knowledge. Including innovation and entrepreneurship knowledge. Through their own excellent professional knowledge, it is relatively easy to learn innovation and entrepreneurship knowledge, and plays an important role in cultivating their own innovation ability.

5. Conclusion

Innovative entrepreneurship has been in-depth for a long time since it was put forward. It is enough to prove that this is a long-term education. In the process of training higher education talents, universities should pay more attention to the promotion of innovation and entrepreneurship education and optimize the resource structure in addition to learning professional knowledge. Really meet the needs of society with a dual-creative spirit of the compound talents. Integrating innovation and entrepreneurship knowledge into the training system of Civil Engineering Specialty in Colleges and universities, renewing concepts and promoting the construction of teaching staff in innovation and entrepreneurship education, so as to promote the integration of both in breadth and depth, and improve the achievements of future innovative entrepreneurs.

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