Research on the Role of Skill Competition in Innovation and Entrepreneurship of Computer Majors in Higher Vocational Colleges

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Abstract: With the gradual maturity of education in higher vocational education, higher vocational education has attracted more and more attention from the society. The first impression given by the word "higher vocational" is no longer a forced choice, but a education of skills and the cultivation of skilled talents, and the society is in urgent need of skilled talents. At the same time, due to the expansion led to the situation of university students' employment is becoming increasingly rigorous, every college education mode but the current college students' general lack of innovation ability, thus to strengthen the reform of the creative education in higher vocational colleges. Computer specialty in higher vocational colleges, the author of this paper innovation entrepreneurship education present situation, higher vocational colleges on how to build innovative entrepreneurial education combined with computer class specialized education as one of the model for further research and put forward suggestions and improvement measures.

1. Introduction

The continuous development of mankind is also a process of continuous innovation. The growing progress of society cannot be separated from the contribution of new things, new skills, and new types of talents. Among them, innovative talents are the main force for social and economic development. For colleges and universities, the ability to cultivate the innovation of entrepreneurship education for university students is the direction of the national policy and is also an inevitable requirement for the development of the social market. As far as the computer major is concerned, the traditional classroom education model and curriculum content can no longer meet the needs of the current social market for computer professionals. Only by cultivating students' ability to innovate and innovate can we provide innovative talents for the society and meet the requirements of computer modernization. This article studies the strategy of cultivating innovative abilities in entrepreneurial education for computer majors and hopes to help the reform of computer professional education.

2. The Connotation of Innovation and Entrepreneurship Education

At present, there are three basic understandings about the connotation of the education of innovation and entrepreneurship: the first is to understand the education of innovation as the education of innovation. (B)The second is to consider innovative entrepreneurship education as entrepreneurship education; the third kind is the education idea which combines innovation and entrepreneurship. In China, there are not many experts and scholars who combine innovation and entrepreneurship." We have not yet formed a sound and scientific educational concept," he said. In the development report on innovation and entrepreneurship education of Chinese university of China, the point of view on innovation and entrepreneurship education is that innovation and entrepreneurship education complement each other. It is not scientific and difficult to implement in practice. It is easy to cause deviation. In the course of constant reform, the higher vocational

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colleges will combine the innovation and the pioneering education, and unify the new ideas and practice under the new mode of entrepreneurship education as a whole. The future and direction of higher vocational education under the guidance of the scientific concept of development have been further demonstrated. Under the new educational concept, the education of innovation and entrepreneurship has been defined, from a macroscopic point of view. He said that innovation and entrepreneurship education is a major reform of education, and it is related to educational practice. At the micro levelThe education of innovation and entrepreneurship is an educational activity for the practice of new jobs in the modernization drive, and it is a skill for the students of higher vocational education to combine their learning and be able to obtain flexible employment through innovation and entrepreneurial awareness training.

3. Present Situation and Existing Problems of Innovation and Entrepreneurship Education in Higher Vocational Education in China

China has always attached great importance to innovation and entrepreneurship, and in the past decade or so the education of innovation has been greatly supported and developed. The basic form has three main aspects. The first is curriculum education, the second is the organization of various competitions and activities as the center, and the third is the construction of hatching bases as the center. At present, the education of innovation and entrepreneurship is still in the initial stage of continuous progress and development. In terms of computer majors, many higher vocational colleges have carried out various forms of entrepreneurship training and entrepreneurship lectures. He also participated in national and provincial entrepreneurial competitions and practical activities. Some higher vocational colleges have set up incubation bases for college students and offered courses related to innovation and entrepreneurship. The school organized a computer network technology contest. A series of courses or seminars on entrepreneurship related to competition and entrepreneurship have been held. A series of activities to promote innovation and entrepreneurship, such as the venture association. Although the above educational activities have achieved some results, there are still many shortcomings in the education of innovation and entrepreneurship in higher vocational colleges. The following are the main features:

3.1. The Orientation of Educational Ideas is not Clear.

The education of entrepreneurship has not been integrated into the school's physical education system, and the students' awareness of entrepreneurship is weak, and the enthusiasm for entrepreneurship is not high. At present, the higher vocational education in our country is mainly carried out. However, in carrying out education on innovation and entrepreneurship, the students have not been able to arouse the enthusiasm of the students.

3.2. There is a Shortage of Teachers.

At present, teachers engaged in innovation and entrepreneurship education and training in higher vocational education in China are mainly composed of teachers engaged in the teaching of enterprise management discipline and guidance teachers for students' employment. Teachers should be mainly employed. Most of these teachers have rich theoretical knowledge in books, but they lack entrepreneurial experience and practical ability, and they cannot understand and transmit entrepreneurial spirit and venture risks. He said that in the course of training students in innovation and entrepreneurship, they have more pure theoretical knowledge and little talk about practical experience. However, innovation and entrepreneurship education is especially focused on practice and practice. He said that it is impossible to grasp the essence and essence of innovation. Using such a faculty to teach entrepreneurship courses is not convincing for students.. This leads directly to the unsatisfactory effect of entrepreneurship courses. However, some higher vocational colleges have realized that there are many problems in teacher selection, training and cooperation, and there is no mechanism.

3.3. The Teaching Form is simple and single, and cannot achieve the Desired Effect.

Compared with the foreign innovative entrepreneurship education courses, it will be found that the teaching of innovative entrepreneurship courses in China is only confined to classroom teaching and theoretical explanation. For the innovation of entrepreneurship, this emphasis on practical ability to improve the course. The effect of classroom teaching is poor. The survey found that 87% percent of the students felt that starting a business was a simple thing after finishing the course, including those who were determined to do it. There are ninety Percent of students think they don't get much experience in the entrepreneurial class. Therefore, it is necessary to explore the diversified teaching mode.

4. The Role of the Skills Competition

Two important aspects of college students' study at school: the accumulation of basic knowledge and the cultivation of innovation and entrepreneurship. The traditional classroom teaching form is an important means for students to accumulate basic knowledge." The competition is one of the most effective means for the development of innovation and entrepreneurship," he said. The skill competition is to cultivate students' research ability. A major means of innovation ability, through teachers to guide students to participate in the competition, so that students can be guided by a teacher in a mechanism similar to that of postgraduate training, which can greatly broaden the students' knowledge. It is also necessary to improve the ability of students to analyze problems, deal with problems and solve problems. He said that there is a great potential for innovation and entrepreneurship. In addition to various skills competitions and trials in schools, there are off-campus provincial and national skills competitions. Such as the "blue bridge cup" software design competition, "university cup" software competition, "business plan competition," challenge cup "science and technology competition, experimental competition, teacher training skills competition and so on. The competition provides a platform for students to improve their ability to innovate.

5. Effective Ways to Cultivate Innovation Ability in Computer-Based Professional Entrepreneurship Education through Skill Competition

5.1. Establishing the Concept of Professional Education and Innovative Entrepreneurship Education.

China's long term examination oriented education has severely restricted the development of students' unique personality and innovation ability, and in the face of the development requirements of the information age, the problem of computer specialized students' education is becoming more and more obvious. School education lacks innovation consciousness, and if you want to keep up with the pace of the times, it is urgent to train students' ability of action and innovation to adapt to the rapid development of technological reform. To cultivate the creative ability of computer majors in entrepreneurship education, we should cultivate students' divergent thinking on the basis of their basic knowledge and skills. Stimulate students' innovation ability and creativity. To sum up, in order to realize the innovative pioneering education of computer majors, we should first establish the idea of students' professional education and innovation pioneering education. Under the guidance of the new concept, students' innovation ability and entrepreneurial ability will be improved, so as to enhance their sense of social responsibility and realize their own value.

5.2. Establishment of New Talent Development Programs.

Building students' innovation consciousness is only the first step in the education of innovation and entrepreneurship of computer majors. In addition, schools should also carry out the necessary new talent training programs. It is necessary to plan and set standards for the training of talents, which will be of great significance to students' learning and activities. Second, it is also a road map for the implementation of the program. It needs to be clear the goal of cultivating innovation ability

in entrepreneurship education is consistent with that of professional education, both of which are aimed at cultivating talents needed for the needs of modern market. He said that the combination of the two will be more conducive to the development of an open, respectful and innovative mode of personnel training, so as to achieve the goal of setting up a new talent training program.

5.3. Focusing on the Selection of Students.

Computer majors should have a solid professional foundation, be interested in the major, have a certain understanding and be flexible. The trait of being hardy. Only students who meet these requirements can persist in the training process of the competition and then promote each other, so the selection methods and methods of the students participating in the competition are very important. Teachers can select students in three aspects: classroom answers, classroom exercises, and the quality of the curriculum design.

5.4. Let Students Fully Realize the Benefits of Competition.

To carry out the skill competition in higher vocational colleges, we need to gain the recognition and recognition from various parties. As receptor of skill competition, closely interact with teachers and students to obtain guidance, available as a graduate student training mode and effect, can quickly and efficiently develop student's own views and ways of thinking, greatly improve the students' self-study ability, can show when employment work and the certificate. As the instructor of skill competition, teachers can also gain benefits in this process. First of all, competition can keep teachers' professional knowledge updated. Second, to win teaching competition awards and achievements, increase the promotion of professional title capital; For teachers with a studio or company, a project team may also be acquired by bringing a competition. As a supporter of the skills competition -- the school, a series of honors obtained by students through the competition can increase the comprehensive competitiveness of the school and improve the reputation of the school. Through competition, students' quality and employment wage level will be improved obviously, and students' confidence in the presence of migrant workers will be greatly enhanced. By taking part in the competition, the students can drive the school to have a good school style and study style and reduce the school management burden. Can build brand students, cultivate a number of alumni who can give back to the school in the future, and promote the construction of the school.

6. Conclusion

The continuous development of the information age, drive the emergence of many new technology and development, especially in the IT industry products renewal speed is far beyond the imagination of people, no doubt increased the computer professional students employment pressure, strengthen the skills competition innovation ability training of computer professional students entrepreneurial education, is the key to the students of the major social competitiveness, and the skills competition is of higher vocational computer kind professional personnel training mode is an effective supplement to a new generation of information technology can be better integration into the higher vocational curriculum system, can cause higher vocational students' understanding of the mainstream technology of computer class skills and to use, It is conducive to improving the employment competitiveness of students. Meanwhile, it has played the role of cultivating and promoting the innovation and entrepreneurship of excellent students who have the ability to study computer science. The research and analysis of this problem in this paper is expected to provide a certain theoretical basis for the reform of education major in computer science in colleges and universities.

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References

- [1] Jervan G, Ellervee P, Kruus M. Innovation and entrepreneurship in the computer systems curricula and Nordic Master School in Innovative ICT[C]// Eaeeie Conference. IEEE, 2011:1-4.
- [2] Carayannis E G, Campbell D F. Editorial preface to the first volume of Journal of Innovation and Entrepreneurship[J]. Journal of Innovation & Entrepreneurship, 2012, 1(1):1.
- [3] Gavenda M, Riel A, Azevedo A, et al. Fostering Innovation and Entrepreneurship in European VET: EU Project "From Idea to Enterprise" [C]// European Conference on Software Process Improvement. Springer Berlin Heidelberg, 2013:282-293.
- [4] Gaur V. INNOVATION AND ENTREPRENEURSHIP IN KNOWLEDGE BASED ECONOMY[J]. International Journal of Research in Computer Application & Mana, 2013.
- [5] Petrakis P E, Kostis P C. Medium term effects of culture, transactions and institutions on opportunity entrepreneurship[J]. Journal of Innovation & Entrepreneurship, 2014, 3(1):1-22.
- [6] Househ M, Alshammari R, Almutairi M, et al. Building a Culture of Health Informatics Innovation and Entrepreneurship: A New Frontier.[J]. Stud Health Technol Inform, 2015, 213:237-240.
- [7] Cunningham P. Insights into open innovation and ICT entrepreneurship in Africa[C]// IEEE International Symposium on Technology and Society. IEEE, 2016:1-8.
- [8] Yadav V, Goyal P. User innovation and entrepreneurship: case studies from rural India[J]. Journal of Innovation & Entrepreneurship, 2015, 4(1):5.
- [9] Wei L, Wei Y. Information System Construction and Statistical Analysis of Innovation and Entrepreneurship Education[C]// International Conference on Intelligent Transportation, Big Data & Smart City. IEEE Computer Society, 2016:443-447.
- [10] Xuan C X, Ying W, Amp I. Exploration on Fusing Innovation and Entrepreneurship Education With Computer Courses Hierarchically and Progressively[J]. Computer Knowledge & Technology, 2017.
- [11] Chen Z, Zhou J, Chen W Y. Research on Students' Innovation and Entrepreneurship Education Mode in the Computer Major in Local Undergraduate Colleges[J]. Journal of Hunan Industry Polytechnic, 2017.
- [12] Newell B S, Varshney L R. The first cohort in a new innovation, leadership, and engineering entrepreneurship B. S. degree program[C]// IEEE Frontiers in Education Conference. IEEE Computer Society, 2017:1-6.
- [13] Wang Y. Development and Implementation of Innovation and Entrepreneurship Project Management System for College Students[C]// International Conference on Intelligent Transportation, Big Data & Smart City. IEEE Computer Society, 2018:504-507.
- [14] Zheng Q H, Wei L I, Zhou J H. Research on the Reform of Computer Specialty Curriculum Targeted on the Cultivation of Innovation and Entrepreneurship[J]. Education Teaching Forum, 2018.