Construction of the Mode of Training Innovation and Entrepreneur Talents Based on School-enterprise Cooperation Network Engineering

Qing Lu [1,a], Jun Lu [2] and Xin Chen [3]

[1.]Hunan Police Academy Changsha, Hunan, China

[2.] China Academy of Launch Vehicle Technology, beijing, China

[3.]Yueyang Housing Fund Management Cent , Hunan, China

[a.]hn_luqing@126.com

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Abstract. In recent years, due to the saturation of the low-end network talent market, the general phenomenon of "difficult employment of network engineering students and employers not to be recruited by employers" has emerged in the employment market of undergraduate students, which leads to the shrinking or stopping of the network engineering major in some applied universities. In view of the characteristics of the colleges and the needs of the social and economic development for innovative and entrepreneurial talents, this paper analyzes and studies the shortcomings of the current innovation and entrepreneurship education, and puts forward the basic frame of the innovative and entrepreneurial education mode of the network engineering professionals from the aspects of education policy, the Department of innovation and entrepreneurship, the social intermediary, the service platform and the students' work. Set forth the functions and cooperation of all parties in this model, and provide guidance for the construction of the educational theory system and the educational management mechanism focusing on the cultivation of innovative spirit and entrepreneurial practice ability.

Introduction

In recent years, the network engineering major, as a professional with the characteristics of practical skills training, adheres to the road of innovation and entrepreneurship education, and increases students' practical training opportunities. Because of the discipline characteristics of network engineering, the employment scope of graduates is flexible and the threshold for entrepreneurship is very low. However, the existing education model is still a long way from the true innovation and entrepreneurship education model. Teachers lack the awareness and ability to carry out innovation and entrepreneurship education. In particular, the combination of innovation and entrepreneurship education and professional education of network engineering professionals is not tight, and it is out of touch with practice. The pertinence and effectiveness are not strong, and the practice platform is lacking. The 18th National Congress of the Communist Party of China made important arrangements for the cultivation of innovative and entrepreneurial talents. The State Council has put forward clear requirements for strengthening innovation and entrepreneurship education. Clearly put forward the implementation of the "double first-class" innovative talent training program, and strive to cultivate all kinds of top-notch innovative talents with innovative spirit and practical ability and technical and technical talents urgently needed by the economy and society. Therefore, from network engineering professional disciplines, establish school-enterprise cooperation mechanism, the various factors involved in the growth of the students into account, to explore a road permeate all aspects of innovation and entrepreneurship education, for the training to adapt to the future "Internet + "The era of network engineering technology skills talents have important reference value.

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Current Status of Network Engineering School-Enterprise Cooperation

The Role of Talent Cultivation in School-Enterprise Cooperation and Innovation.

At present, the domestic school-enterprise cooperation innovation model is "University The development of the "Science and Technology Park" model is the earliest and most mature. Investigating the operation of well-known university science parks in China, and drawing on the mature experience of foreign countries, the role of this model in the cultivation of innovative talents is summarized as follows.

1. Innovative entrepreneurs enter the classroom to improve the innovation and entrepreneurship curriculum system

Stanford University School of Management, the leader of the University Science Park, opens for entrepreneurs 17 entrepreneurial management courses, covering different levels of problems and strategies at different stages of entrepreneurship, and how to choose entrepreneurial strategies in different entrepreneurial environments. The Tsinghua University Science Park is a typical example. As the academic leader of the school, the elite also undertakes scientific research tasks and innovative talent training while establishing enterprises in the science and technology park.

2. Enjoy more convenient educational resources with modern educational technology

Colleges and universities have rich teaching resources, library information resources, through the application of modern educational technology, such as the opening MOOC, online classrooms, etc., let the school classroom enter the university science and technology park, and innovative entrepreneurs can use the fragmentation time to complete the theoretical course learning while practicing innovation and entrepreneurship. In addition, the university's rich library resources and online information resources can provide convenient knowledge retrieval services for innovative entrepreneurs to help them better carry out innovation and entrepreneurship activities.

3. Success stories from science parks provide emerging education for innovative entrepreneurs

Case teaching has gradually become the mainstream in business education. Generally, universities and enterprises are accustomed to adopting systematically compiled cases such as the Harvard Case Library and the Tsinghua Case Library as teaching materials. However, these cases can only be presented to readers with static information, lacking fresh flesh and blood. The University Science Park provides another way of teaching case studies in colleges and universities – letting live cases go into the classroom. With the appearance of successful entrepreneurs in the University Science Park, fresh cases are introduced into the classroom, allowing students to more realistically feel the scenes of the case, thus deepening the understanding of the application of theoretical knowledge in practice.

4. Provide practical education opportunities and platforms for innovative entrepreneurs

Generally, the Science and Technology Park can provide innovative and entrepreneurial practice bases for college students. College students can directly participate in the innovation and entrepreneurship activities of the science park, and can participate in innovative seminars and entrepreneurial competitions in various forms and parks. Start communication and learning. In addition, in addition to providing capital and policy incubation functions for innovation and entrepreneurship, science and technology parks directly participate in the innovation and entrepreneurship activities of science parks, and provide consulting and assistance for innovation and entrepreneurs in management and technology.

The Status Quo of Innovation and Entrepreneurship Education.

In the distribution of network engineering majors in various colleges and universities, nearly half of the colleges and universities are two local undergraduate colleges. The training of network engineering professionals needs to focus on cultivating the "Internet +"Multi-industry multi-level application skills talents, such as Internet + transportation, Internet + tourism, internet + Medical, etc., the network engineering profession has a great crossover in the job market, and it has high requirements for students' adaptability. It is the top priority of the students in this major to train students' basic abilities and to cultivate students' comprehensive ability with innovation as the goal. At present, many colleges and universities have done a lot of work in innovation and entrepreneurship education, including strengthening the construction of innovation and

entrepreneurship courses, implementing the construction of “creator space”, and organizing the national “Internet”. + "University Innovation and Entrepreneurship Competition is the leading event. However, from the perspective of the training of network engineering professionals, the following problems still exist.

1. Innovative entrepreneurship education system is imperfect

At present, innovation and entrepreneurship education is increasingly valued by education authorities and higher education institutions. Many schools have established specialized innovation and entrepreneurship colleges. However, compared with the traditional undergraduate colleges, the Academic Affairs Office and other management departments, innovation and entrepreneurship colleges has not become an indispensable functional department of colleges and universities, and cannot undertake independent teaching practice activities. Although some innovative entrepreneurship work is carried out smoothly in colleges and universities, it is still utilitarian. Most colleges and universities do not regard innovation and entrepreneurship education as part of the mainstream education system of higher education, nor do they form a relatively mature theoretical system and framework.

2. a single form of innovation and entrepreneurship education

In recent years, in order to improve the enthusiasm of students, the education authorities and provinces and cities are keen to hold innovative and entrepreneurial science and technology competitions, entrepreneurial design competitions, etc. Many events have also become a plus for student insurance research. The network engineering majors of various universities have continuously participated in the activities of students' innovative and entrepreneurial ability, and achieved good results. However, the single form and quantitative indicators make colleges and universities often take utilitarianism when participating in these competitions, aiming at the competition results as the goal and the end point; it is difficult for the instructors to play a long-term role in such short-term assault events; Potential teams are not well maintained after the game and lose their development potential. Therefore, the innovation and entrepreneurship competition should be integrated into the talent training objectives of various professions to develop more forms of innovation and entrepreneurship education.

3. innovation and entrepreneurship education is not professional

First, the professional personnel training programs did not develop innovation and entrepreneurship education credits, both in theory and practice, no appraisal system innovation and entrepreneurship education, leading to innovation and entrepreneurship education professional is not strong. The employment quality report of each school also focuses on the employment rate, and there is little mention of the cultivation of students' innovative entrepreneurship thinking. Therefore, this discipline construction and planning, personnel training programs and talent evaluation system disjointed quality innovative entrepreneurship education a mere formality, too much randomness, would not achieve a good training effect.

In short, it is not enough to implement the training model of innovative and entrepreneurial talents only in the whole school. A complete education system, diverse educational forms and professional education models can give a broader space for innovation and entrepreneurship education.

The Network Engineering Professional School-Enterprise Cooperation Innovation Entrepreneurship Training System construction.

1. school-enterprise jointly develop training objectives

The determination of the school-enterprise cooperation innovation and entrepreneurship talent training target should be jointly formulated by universities and enterprises. Enterprises should reflect the needs of the future development of employees' network engineering majors into talent training to develop accurate talent training goals. In the face of the challenges of economic globalization, the types of talents required by the state and society have undergone qualitative changes, with innovative consciousness and innovative ability, which are the core of talent quality in the new era. As a research university, it is reasonable to train advanced and innovative talents for the country. Network engineering teaching should work with enterprises to develop and train talents

to adapt to the society, adapt to the needs of enterprises, and have strong practical ability. The teaching and research university is located between the research university and the teaching university, and mainly cultivates talents at the undergraduate level.

2. school and enterprise joint construction of teaching system

At present, professional courses in Chinese universities are divided into professional basic courses and professional courses. Professional basic course refers to an introductory course for students to study this major in depth. It is the basic theory and basic knowledge that students need to learn in depth, and it is used to train students' abilities and basic qualities. It mainly includes theoretical teaching and experimental, practical and practical teaching links that are suitable for this major. The basic class courses, professional basic classes and professional courses should not be less than 1/3 of the students' total credits in the course setting. The basic class and engineering basic courses should be able to reflect the importance of the natural and mathematical disciplines to the training of the application ability of the major. Professional courses should reflect the important role of system design and practical ability training.

3. Practical curriculum system construction

Under the assistance of enterprises, colleges and universities should set up some comprehensive, innovative and designed network engineering experiments and practical training courses to break the barriers between theory and practice, and promote the combination of theory and practice. The enterprise should take out some projects that can make students participate in the research, analysis and design directly. Students can carry out the project under the guidance of the tutors within the school or in the enterprise, so that the students can improve their professional ability in the process of real practice. Colleges and universities can take students' participation in practical research as a practical course to calculate credits. In addition, some classes of social services related to professional settings should be set up to enable students to apply their knowledge and skills in school to social practice, so that their network engineering theory and network practice ability are improved.

4. The implementation of dual-teacher teaching

Colleges and universities that have established a research institute with enterprises can send teachers with certain abilities to participate in the research work of the Network Engineering Research Institute. Experts appointed by the Network Engineering Institute should also go to enterprises and schools for a detailed understanding of the period. In the process of work and scientific research, the employees sent by the enterprises, the teachers sent by the universities and the experts hired will surely wipe out the "sparks" in the process of taking advantage of themselves. These teachers can learn about the latest developments and development directions of relevant majors, and can bring the actual work items into the teaching, so that the classroom teaching is no longer based on the textbook, but around this real case, so that the teaching content is closer to practice. And work. Teaching based on real-life cases can improve students' analytical and innovative abilities, as well as provide real-life material for graduation design. The experts appointed by the Network Research Institute completed the one-and-a-half-month enterprise field visit and training. The school sent the backbone teachers to carry out research work in the form of double-teacher teaching. This will not only bring benefits to the enterprise, but also promote the school's network engineering research process, so that colleges and universities can reach the forefront of enterprise technology.

Conclusion

The network engineering major is a highly practical profession with broad professional development prospects, and the demand for practical network engineering talents is constantly increasing. Therefore, the requirements for personnel training to the needs of enterprises combined to enhance the depth of cooperation between schools and enterprises, and constantly improve the professional construction disciplines. Continuously improve the business level of the faculty and combine various school-enterprise cooperation methods to ensure the direction and training objectives of the network engineering major. In the context of the new era, we will also put forward

many new problems that need to be solved for professional development and talent cultivation, carefully study new problems, and propose solutions better, so that the development of network engineering is more perfect and cultivates more conformity. Practical and innovative talents in the Internet age.

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