

Research on Training Mechanism of Applied Talents of Electronic Information under the Background of New Engineering Construction

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Keywords: The new engineering, Electronic information, Application-oriented talents

Abstract: China has the largest engineering education in the world at present. “New engineering” is a new viewpoint of engineering education advancing with The Times in order to adapt to the economic development. In view of the new construction under the background of engineering Local engineering applied undergraduate college of electronic information engineering education reform, development and existing problem, the electronic information engineering specialty of “new engineering” positioning, around the regional industry development demand, formulate development planning, enhancing university-enterprise cooperation, further improve the engineering practice ability of the teachers and students to engineering practice skills learning interest, promoting the economic development of new electronic information for the area and regional transformation of electronic information engineering applied undergraduate colleges and universities. The practice proves that the reform measures in this paper are effective.

1. Introduction

Under the background of rapid economic development, the shortage of talents in China's new generation information technology industry is getting bigger and bigger. Although the standard model of higher education is getting bigger and higher, but the rapid development of artificial intelligence, intelligent manufacturing, “Internet +”, big data and other industries related to the new electronic information technology are generally existing in the people to give insufficient questions.

For a long period of time, there exists a gap in the talents of the electronic engineering, which reveals problems such as the lack of clear orientation of the teaching of the electronic engineering and the lack of close integration with the industry and industry. The concept of “new engineering science” is a new concept related to the education of engineering science, which is not specific or static, but broad and dynamic [1], and is put forward to solve the problems existing in the old engineering education system. Since the concept of new engineering was put forward in 2016, in order to cope with the industrial development, the Ministry of Education has put forward a major reform of engineering education to strengthen the construction of new engineering after the “Excellent Engineer Education and Training Plan” was put forward.

According to the record and approval results of undergraduate majors recently released by the Ministry of Education, Electronic Information Engineering is a new engineering major [2-4]. The electronic information engineering education is closely related to the development of the electronic information industry in the region where the university is located and promotes each other. After the reform of electronic information engineering education in local application-oriented universities has been delayed, it cannot keep up with the development of regional industries. Therefore, it is of great significance to study the transformation of the “new engineering subject” of the electronic information engineering specialty of the university of this subject, which is of great significance to promote the development of the regional electronic information technology new economic and economic development and the development of the electronic information specialty of the local application-oriented undergraduate university.

2. Research Status of New Engineering Education

The development of new industries is in urgent need of a large number of new engineering

talents, which also leads researchers to pay attention to the construction of new engineering. In 2017, the Ministry of Education issued the Circular of the Higher Education Department of the Ministry of Education on Research and Practice of “New Engineering” to help implement the national strategy of “Made in China 2025”. Many scholars have studied and practiced the training mechanism of applied talents in electronic information under the background of new engineering construction. University was founded in 2016, Chinese Academy of Sciences institute of technology of the future with new engineering education, Beijing university also through experimental class form exploring new engineering talents training mode, Shanghai engineering technology university for undergraduate professional training scheme provides a flexible and elastic educational system, break the barriers between disciplines, as local applied the standard type of colleges and universities in the new engineering concept of research and practice of walking in the forefront of the same kind of colleges and universities domestic [5].

The Ministry of Education higher education department notice about to start a new engineering research and practice, made clear for local colleges, new engineering construction organization should be “by the local colleges and universities to participate, to play their own advantages, make full use of local resources, local economic and social development needs and docking enterprise technology innovation, deepen teaching fusion, university-enterprise cooperation, cooperative education, promote to upgrade, to traditional engineering course in local colleges new technical research and practice. Shanghai University of Engineering Science and Shantou University jointly led the contact “. Under the guidance of the Ministry of Education, teaching and research personnel of electronic information related majors in local application-oriented universities have also carried out in-depth research and comprehensive practice on new engineering education, and achieved good results [6-10].

3. Reform Exploration and Practice

For new engineering construction under the background of electronic information engineering specialty in local colleges engineering education reform development put in question, such as read minds view consumes Gu, teaching in curing, association with learning model development can not change, division information and engineering practice force is weak, the students learn in an active sex is not high, etc., research the electronics information engineering industry professional orientation of “new engineering,

The development of industrial development around the region needs to make the development plan, strengthen the school-enterprise cooperation, step by step to improve the engineering practical ability of higher education teachers and students' learning and interest in engineering practical skills, which is to promote the development of regional electrical information new economic development and the local nature should be used in the transformation of the electronic information engineering major in high schools.

3.1 To Study the Orientation of the New Engineering Subject and Make a Reasonable Training Scheme.

The most important attribute of local colleges and universities is “locality”, which should be the position of the important jobs of electronic information engineering in local colleges and universities The development service of the new economic development service for the local electricity sub - information. Both theory and practical courses are designed to serve the local people effectively, and have their own characteristics.

3.2 Study Effective Cooperative School-Running Mode.

Under the background of new engineering construction, this paper studies the “three cooperative” school-running mode of the engineering program of the university and other disciplines of the university, the educational mechanism of the university and the educational mechanism of the national well-known information and information innovation, and the school-running mode of the local enterprise.

3.3 To Improve Teachers' Practical Skills and Students' Interest in Learning Practical Skills.

Design a reasonable teacher training program, study and practice the application, research and results form of items or course topics Skill and method;To study the methods of improving students' practical ability and explore the mechanism of cooperation between students and teachers' practical practice.The common progress of reality teaching and learning.

Through the above research, solved in the new engineering construction under the background of electronic information engineering specialty of location problem, make a reasonable plan for means and clear direction, break through the traditional personnel training mode, electronic information engineering through the school-running pattern of “three synergy” cross-border integration ability of applied innovative talents, to solve the current teachers and students widespread heavy theory, light practice problem, improve teachers' and students' engineering practice ability.

4. To Change and Create New Things

4.1 Develop a Comprehensive Project Implementation Plan

Guided by the new engineering concept, through the external research and expert on the certificate, contends for the cost, the electrical information information, engineering process and professional process should be subject to the course body system and the course inside the transformation of the close cut, to develop a scientific application of innovative talent training program.

4.2 To Study the Co-Development Path of Electronic Information Engineering Specialty and Other Specialty of Our School

Research of electronic information engineering specialty and the school of professional association with other disciplines development path, such as the case and the faculty of machine electrician cheng, raw material and environmental engineering and science, computer college of engineering and applied mathematics and other related professional cooperation, will this major in data collection, information processing, the number According to the transmission and other areas of expertise and different application background,Cultivate and cultivate students' cross-boundary application ability.

To explore the cooperation and innovation of the educational mechanism of innovation and innovation.According to the statistics of the undergraduate students of 2014, some of them have received or are receiving the training of the private education system in the receiving country.Before the national knowledge and information innovation and entrepreneurship education mechanism in the curriculum capacity of the selection side than the classroom teaching and learning more close to the actual process, teachers in the practical development side also accumulated more rich experience, the country also has the relevant support policy for this kind of enterprise with the innovation and new innovation and industry incubation function.

Deepen the cooperative development with the local electronic information enterprises.The major of Electronic Information Engineering has been paying close attention to the development of the electronic information industry in Changsha, and has established good cooperative relations with a number of high-tech enterprises, providing a good cooperation platform for students to practice and develop practical projects.At present, the major of Electronic Information Engineering and a number of electronic information related enterprises in Changsha City have the intention of further in-depth cooperation in the aspects of student internship, technology development, innovation and entrepreneurship training, which provides conditions for the implementation of the “three-cooperation” school-running mode of the project.

4.3 Adopting a Variety of Measures to Improve Teachers' Practical Skills and Students' Interest in Learning Practical Skills.

To make full use of the college's support policies for teacher training, to encourage professional teachers to participate in the training of new engineering subjects, improve the practical ability of

teachers, and tighten the development direction of new technical skills;Organize the teachers of the project team to understand the technical needs of electronic information related industries in Changsha, actively undertake horizontal projects such as enterprises' application for technical research, explore the incentive mechanism for students to participate in horizontal projects, expand the scope of students' participation in horizontal projects, and improve the depth of students' participation in projects;In order to strengthen the interaction with students in the process of training, enhance students' interest in professional practice, and realize the common progress of teaching and learning.

Encourage students to participate in the writing or application of science and technology articles, professional interests and software writing rights, etc., to improve the professional education, in the past two years, students of the electronic information engineering professional issued a number of scientific and technological articles, and granted a number of utility model patents.

5. Conclusion

In a word, in the local application-oriented undergraduate colleges and universities, the construction of new engineering disciplines is carried out in the practice of teaching and learning which should be cultivated by talents, in order to remove the shackles of thinking and thinking, avoid the consolidation of teaching and learning, explore the cooperative learning model, strengthen the engineering practice ability of teachers and improve the learning enthusiasm of students.

It is of great significance to strengthen the location of “new engineering section” of electronic information technology, and to promote the development of regional electronic information technology new economic development and the transformation of electronic information technology technology.

References

- [1] Lin Jian. New Engineering Construction Leading Higher Education Reform [J].China Higher Education, 2017 (Z2) : 40-43.
- [2] Jin Biao, Zhang Zhenkai. Reform Strategies of Electronic Information Engineering Undergraduate Graduation Design under the Background of New Engineering Construction [J].Journal of Higher Education, 2019 (12) : 65-66+69.
- [3] Bi Yang. Exploration and Practice of Curriculum System Reform of Electronic Information Engineering Major in Applied Universities under the Background of New Engineering [J].Journal of Higher Education, 2019 (11) : 143-144+147.
- [4] Ou Xianfeng, Zhang Guoyun, He Wei, Zhao Lin, Tu Bing, Lu Youli.Under the background of the new engineering branch, the electrician believes in the information of the working process, and the professional workers are only trained and nurtured to study [J].Journal of Chengdu Institute of Technology, 2019, 22 (01) : 94-97.
- [5] Xia Jianguo, Zhao Jun. Discussion on the Reform and Development of Engineering Education in Local Universities under the Background of New Engineering Construction [J/OL].Advanced Engineering Education Research, 2017, (03) : 15-19+65.
- [6] Xu Quan, Zhao Xiaochun, Liu Yonghao, Dong Yunfeng, Cheng Baozhi.Research and Thoughts on the Construction of Clusters of Electronic Information Technology in Colleges and Universities under the Background of New Engineering Science [J].Journal of Daqing Normal University,2019, 39 (03) : 109-112.
- [7] Zhang Aihua, Liu Zhoufeng, Yang Yan. Research on the Training System of Electronic Information Specialty under the New Engineering Background [J].Journal of Zhongyuan Institute of Technology, 2019, 30 (02) : 85-89.
- [8] Li Haisheng, Xia Haiying, Song Shuxiang. Research and Practice on the Training Mode of

Innovative Ability of Electronic Information Specialty Talents Based on New Engineering [J].Experimental Technology and Management, 2019, 36 (04) :200-202.

[9] Zhou Yuan, Chen Ying, Sun Liping, Hu Fengrong, Zhang Zhuxian, Liu Anling. Investigation of Optoelectronic Information Science and Engineering Engineering Specialized Construction under the Background of New Engineering Science [J].Journal of Changsha University,2019, 33 (02) : 131-13

[10] Zhang Jiehan, Zhang Yu. Research and Practice on the Training Mode of Electronic Information Engineering Specialty Based on the New Engineering Concept [J].Education Modernization, 2019, 6 (18) : 28-31+35.