

Research and Practice on Talent Training Mode of “University-Enterprise Cooperation and Work-Study Combination” in Electrical Specialty

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Abstract: This paper analyzes the problems existing in the implementation of "school-enterprise cooperation, combining work with study" talent training mode in electrical engineering and automation specialty, and puts forward the corresponding concrete countermeasures, in order to make the talent training better serve the development of regional economy and society.

1. Research Significance

Electrical engineering and its automation of talent training objective is based on local, serving local economic and social development needs, the cultivation of art of all-round development of qualified builders and reliable successors of the socialist cause, have basic knowledge in electrical engineering and engineering practice ability, and good development ability, adapt to the development needs in electrical engineering, In the electrical equipment manufacturing industry, power system and related industries engaged in electrical equipment manufacturing, testing, system operation, maintenance and other front-line work, "know professional, strong skills, can cooperate, good at work" with certain innovative spirit of high-quality applied talents. In order to further solve the problem of talent training, the cooperation between enterprises and schools and Work-study combination can not only improve the quality of teaching, but also improve the employment rate of students.[1]

Schools and companies to cooperate, for school and enterprise has a certain value, the first for the school, through the enterprise to join, can increase the school training content, students can not only learn the theoretical knowledge, will also involve the skills, students to understand the enterprise culture, to improve teaching quality, help school to cultivate applied talents. For enterprises to achieve development, a large number of talents is a strong support for development. In the stage of cooperation with schools, corporate culture can be integrated into students' learning content, so that students can work in enterprises later, which can avoid mistakes and cultivate talents for themselves. Therefore, the joint training of professional talents between schools and enterprises is of certain value to both enterprises and schools. Electrical engineering and its major not only need to master the basic knowledge of electricity, but also need to cultivate talents with good humanistic quality and professional ethics. In the training stage, students not only need to use

theoretical knowledge, but also need to establish a good spirit of unity and cooperation, know how to study, have a certain professional spirit.

2. Application Prospect

Electrical engineering and its automation of talent training objective is based on local, serving local economic and social development needs, the cultivation of art of all-round development of qualified builders and reliable successors of the socialist cause, have basic knowledge in electrical engineering and engineering practice ability, and good development ability, adapt to the development needs in electrical engineering, In the electrical equipment manufacturing industry, power system and related industries engaged in electrical equipment manufacturing, testing, system operation, maintenance and other front-line work, "know professional, strong skills, can cooperate, good at work" with certain innovative spirit of high-quality applied talents. In order to further solve the problem of talent training, the cooperation between enterprises and schools and Work-study combination can not only improve the quality of teaching, but also improve the employment rate of students.

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"School-enterprise cooperation, combining work with study" has its unique advantages for the training of electrical engineering and automation professionals under the background of new engineering.

Advantage one: university-enterprise cooperation meets the needs of society and market.

School-enterprise cooperation, through the school's feedback and demand for enterprises, targeted training of talents, combined with market orientation, pay attention to students' practical skills, can more cultivate talents needed by the society.

Advantage two: university-enterprise cooperation is a "win-win" mode.

School-enterprise cooperation, information and resource sharing between schools and enterprises, schools and enterprises provide the use of equipment, enterprises do not have to worry about the training site, so that students' learning in school and enterprise practice organically combined, so that the school equipment, technology and enterprises to achieve complementary advantages, saving the cost of education and enterprise, is a "win-win" mode.

Advantage three: conducive to the training of applied talents.

University-enterprise cooperation can cultivate students' strong vocational skills. In the training of professional ability from low to high, in the process of school of universal professional foundation and procedural operation methods to cultivate ability, enterprise to students through a more specific on the position of "dry middle school" to improve the professional ability training, in a relatively short period of time through concrete practice efficient method to improve students'

ability, So that students with the practice of the process of accumulation of continuous progress, the level of ability to improve constantly. At the same time, university-enterprise cooperation can cultivate students' good professional awareness. Students accept the enterprise management, production, service the first line in the actual production post accept master hands-on teaching, and the enterprise employees, labor and life can experience the strict discipline of the production, meticulous technical requirements, the feeling of difficult labor, the value of collaboration and joy of success, graduation and employment standards. Also to cultivate students' concept of organizational discipline, good professional ethics, serious and responsible work attitude, as well as hard and simple style of life, unity and cooperation of the team spirit and firm optimistic attitude to life are of great help.[3]

3. Status Analysis

Undergraduate education in our country for the socialist construction is one of the core target of innovative and professional training, however, the traditional teaching model because of its inherent teaching mode of the subordinate relationship between students and teachers, often unable to cultivate students' interest in learning and inspire students' innovative ability, at the same time, the traditional teaching mode to cultivate talent is generally based on theory is given priority to, The training of talents practice and practical application ability is poor. The most realistic problem is the mismatch between the talents trained by schools and the needs of enterprises, which leads to the difficulty of employing enterprises and the outstanding problem of student employment [4].

3.1 Main Problems in School-Enterprise Cooperation

(1)School teachers, textbooks and other aspects are seriously out of line with the actual production of the enterprise industry. At present, most teachers are not enough in practical teaching experience, which results in the disconnection between the teaching content taught by teachers and the actual production of industrial enterprises [5]. At the same time, most of the textbooks for professional courses have not been updated in time, and the curriculum system and textbooks for the talent training model of "university-enterprise cooperation and combination of work and study" are lacking.

(2)Lack of understanding and investment in colleges and universities. Many colleges and universities believe that the cultivation of students' practical ability, professional ability and professional quality can be completed through graduation internship and practical work exercise. In addition, most teachers do not have practical work experience in enterprises. For application-oriented undergraduate colleges, they are also faced with problems such as insufficient funding for internship and training conditions and insufficient teacher training.

(3) Lack of power in the enterprise itself. Enterprises pay attention to short-term production efficiency and operating benefits. The manpower, material resources and financial resources of enterprises involved in education have failed to produce economic benefits in the short term. Therefore, enterprises generally lack the internal motivation of "university-enterprise cooperation and combination of work and study".

3.2 Reform Measures to be Adopted in View of the Above Problems

(1) Further promote the talent training model of "combining work with study and school-enterprise cooperation". We will further promote Work-study combination, school-enterprise cooperation, and innovate the school-running system and mechanism jointly built by close cooperation with enterprises. Guide state-owned enterprises and private enterprises to

cooperate with the college to build internship and entrepreneurship bases. The whole process guidance, tracking and training, promote the integration of internship, entrepreneurship and employment, and provide policy and financial support in the incubation and transformation of entrepreneurial achievements.

(2) Promote the reform of teaching model. In terms of teaching content reform, new teaching contents such as new knowledge, new skills and new technology are timely integrated into the classroom with the goal of post demand. We will further promote the classroom revolution. In terms of teaching resources, we will actively promote the development of online teaching resources such as MOOC and micro-class, so as to improve students' ability to learn independently. On reform of teaching methods, emphasis on "taking students as the center", to encourage teachers to carry out the reform of teaching method, case teaching, heuristic teaching, inquiry teaching, the classroom teaching methods into the classroom, the students' applied consciousness and ability of solving practical problems to strengthen training, from the current students "passive learning" to "active learning", Truly make "teaching, learning, doing, evaluation" reflected in teaching. Deepen the teaching reform of teaching methods and methods, actively promote small class teaching, carry out project teaching, case teaching, task-driven teaching, etc., to improve teaching quality. Strengthen the construction of information teaching platform, fully introduce rain classroom, super star learning Tong, wisdom tree and other online teaching resources, carry out pre-class, mid-class and after-class exercises, truly reflect the student-centered education concept.

(3) Pay attention to individual differences and implement individualized teaching. According to the idea of connecting the teaching content with the professional standard, the required competence of the post is condensed, the framework of the required competence of graduates is constructed, the talent training program is formulated, and the training platform of knowledge, quality and ability is built. It emphasizes the cultivation of students' ability, and implements progressive teaching according to the four levels of basic ability, professional ability, comprehensive ability and innovative ability, so as to achieve the goal of talent cultivation of the school. Take student development as the center, pay attention to students' different characteristics and personality differences, and implement individualized teaching. Increase the number of enterprise courses and elective courses to realize students to choose courses independently; Carrying out graded teaching; Students are encouraged to take credits across schools according to their learning ability; We will relax the length of schooling for students and allow them to adjust their course of study and suspend their schooling to make innovations and start businesses. Open a green channel for students to re-choose their major, allowing more students to re-choose their major.

(4) Deepen examination reform and pay attention to process evaluation. It is an important content to strengthen the evaluation of students' development to perfect the methods of course learning assessment. Teachers should take students' learning process and ability to analyze and solve problems with knowledge as the focus of assessment, and increase the proportion of homework, peacetime assessment and stage-based assessment in their academic performance. Through discussion, in-class test, paper, debate, practice, homework, project design and other ways to guide students to improve their learning style, change passive learning to independent, inquiry-based learning, to promote students' all-round development.

(5) Strengthen the construction of "double qualified and double capable" teaching staff. Encourage self-owned teachers to carry out practical ability training in professional cooperative enterprises, encourage teachers to get real training in the technical services and technical transformation of enterprises, teachers should continuously strengthen their participation in the construction of experimental and training bases in schools, and encourage them to give priority to engineering and other professional and technical positions in the evaluation and employment of professional titles. At the same time, enterprise teachers with engineering practice experience are

hired to enter the classroom, and practical engineering cases are added to the teaching content.

4. Conclusion

"University-enterprise cooperation and Work-study combination" is the fundamental approach for application-oriented undergraduate colleges to cultivate application-oriented talents that meet the needs of economic and social development and meet the needs of enterprises. Under the situation of severe employment pressure, application-oriented undergraduate colleges should build a school model integrating schools, industrial enterprises and students, give full play to the respective advantages of the three parties, promote the training of application-oriented engineering and technical talents, and lay a good foundation for the employment of college students.

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