

Research on the Teaching Innovation Method of Electrical and Electronic Technology Course from the Perspective of Educational Resources Integration

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Abstract: This Paper Analyzes the Problems Existing in the Teaching of Electrical and Electronic Technology Courses in Vocational Colleges from the Two Aspects of Students' Learning and Teachers' Teaching, and Holds That the Main Problems Existing in the Current Teaching of Electrical and Electronic Technology Courses in Vocational Colleges Are That There is No Targeted Teaching Innovation for the Actual Problems in Teaching Practice. Based on This, This Paper Discusses the Innovation Path of the Course Teaching of Electrical and Electronic Technology in Vocational Colleges, and Points out That the Main Direction of the Course Teaching Innovation is to Renew the Concept, Innovate the Teaching Mode and Method.

1. Introduction

Electrical and Electronic Technology Courses Are the Basic Electrical Courses in Professional Schools. They Have the Characteristics of Strong Theory and Practice, Extensive Knowledge, Rich Learning Content and Short Academic Time. Not Only Has Higher Requirements for Students' Learning Ability, But Also Teachers' Curriculum Guidance is Very Difficult. Junior Colleges Have Weak Student Bases and Poor Initiative in Learning[1]. This is Not Good for Studying Electrical and Electronic Technology Courses. in Addition, the Traditional Teaching Mode Focuses on the "Guidance" of Teachers. in the Teaching Practice, Ignoring the Students' Position, the Teaching Effect of Electrical and Electronic Technology Specialty in the Professional School is Not Satisfactory. from the Point of View of Curriculum Education, This Paper Discusses the Educational Innovation Path of Electrical and Electronic Technology Courses in Colleges, and Introduces the Relevant Research References.

2. Problems in the Teaching of Electrical and Electronic Technology Courses in Vocational Colleges

The problems in the teaching of electrical and electronic technology are mainly students' learning and teachers' guidance[2]. As for students' learning, there is the weak electricity foundation of students. The quality of college students is quite different, and their learning ability is generally weak. Due to a large number of learning content and strong theoretical foundation, some students with poor foundation are difficult to adapt to and often can't adhere to in the course of electronic and electrical technology for a period of time. The progress of education forms a vicious circle. For the sake of simplicity, enthusiasm for learning, concern for learning and loss, several popular direct routes give up learning. The second is poor learning initiatives. The electrical and electronic technology courses in professional schools have rich learning content, short academic time, strong theory and practice, which put forward higher requirements for students' initiative and self-learning ability[3]. Many professional students have strong self-control, lack of active consciousness and plan in network, game and other aspects. As for the "teaching" of teachers, first of all, there is the problem that the concept of teaching progresses with the passage of time, and its concept lags behind the times. Modern educational thinking emphasizes the position of students as learning objects. However, in the practice of education, many teachers still put forward the previous

concepts. In the classroom, we should focus on the teachers and ignore the students' subjectivity[4]. Of course, if there is a deviation, the teaching effect is not sufficient. Second, the lack of innovation in teaching models and methods has nothing to do with it. The traditional education mode and method pay attention to the transfer of knowledge, they do not pay enough attention to the cultivation of students' ability, and the evaluation method is not scientific. As for the teaching guidance of colleges, the characteristics of training talents in colleges are ignored. It adapts to the specific needs of students and does not innovate teaching mode and method. The main problems of curriculum education[5]. Generally speaking, the lack of target curriculum innovation aiming at practical problems in education is the main problem of electrical and electronic technology curriculum education in vocational colleges. Please strengthen the research of curriculum innovation and change the teaching ideas and concepts. The reform of teaching mode and method is an important direction to change the current situation.

3. The Path of Teaching Innovation of Electrical and Electronic Technology Courses in Vocational Colleges

3.1 Update Teaching Concept

The traditional education thought ignores the status of students as learning objects, and the concept of Teacher centered is more and more difficult to adapt to the development and change of the new era[6]. Therefore, the purpose is to reconstruct the teaching concept, change the teacher centered thinking in the traditional teaching concept, establish the student-centered guiding concept, and reform the teaching of electrical and electronic technology in the college. Modern educational thought emphasizes the status of students as learning subjects. That is to say, education should mobilize students' subjective initiative and cultivate the core and core of students' autonomous learning ability. Teachers play a more guiding role[7]. The characteristics of electrical and electronic technology courses in professional schools determine that students' initiative and self-learning ability are important links in learning courses. That is determined by the concept of teaching. The traditional concept of education emphasizes the ability training of knowledge transfer and light, the things teachers teach, the things students learn, the inhibition of students' initiative and enthusiasm, students do not have the ability of independent thinking and innovative thinking. What has a great influence on the final effect of curriculum learning is the talent training goal of the college. To renew, we must change the concept of education with the thought of modern education[8]. Teachers' guidance should focus on the long-term development of students. The combination of theory and practice should focus on students' ability. Cultivate “top leaders” and “top leaders”, fully mobilize students' enthusiasm for learning, and guide students to form a healthy and efficient education atmosphere.

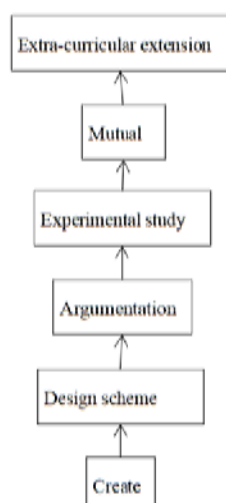


Fig.1 Research Classroom Teaching Mode

3.2 Innovative Teaching Mode and Method

The course of electrical and electronic technology in vocational colleges is a professional course which combines theory and practice closely and has a strong foundation[9]. The innovation of teaching mode and method should be combined with the characteristics of the course, using modern information technology methods and means to push through the old and bring forth the new, forming a scientific and efficient teaching mode and method with the characteristics of vocational colleges.

Project guidance method is to guide students to complete the tasks and objectives of the project through the guidance of teachers and based on the project. Project teaching method emphasizes the combination of theory and practice. It is to complete the teaching methods of teachers and students, and to guide them together. The theory of electrical and electronic technology courses is practical, which requires high ability of students. In the practice of education, the task of arousing students' learning enthusiasm is promoted by combining the project-based teaching method. Take part in. The teaching process is guided by teachers, and the roles of teachers and students change. We should pay attention to the cultivation of students' autonomous learning ability and problem-solving ability. This teaching method first advocates training, and then through speaking, learning and learning, it has a great contribution to the cultivation of students' comprehensive ability. Peng Peiyao, qzzhan, Wang Xinyou and other practical studies show that the students are very willing to participate in the technical innovation education of project guidance method combined with the characteristics of electrical and electronic technology courses, which has a strong learning effect. In addition, it is applicable to the useful methods of electronic and electrical teaching in professional schools.

The combination of homework research is an educational model combining research with work and work. With strong practicability, the combination of work and research can enable students to learn knowledge in the shortest time, improve the understanding ability of theoretical knowledge, and train students' practical ability at the same time. That is a very suitable education mode for vocational education. In the course of electrical and electronic technology, the combination of engineering and learning can not only learn theoretical knowledge, but also improve practical technology. Then, put the knowledge into practice. From this point of view, the guidance method of the combination of occupation and learning is closely combined with the practice goal of vocational training school, and has strong adaptability. Chen Changchun, Jiang Qingkui and other junior colleges explored the education mode of "combination of work and research" in the field of electrical and electronic specialty. The results show that this guidance model is very important to cultivate students' practical ability, operational ability and problem-solving ability. Appropriate use can greatly reduce the time for students to adapt to social needs.

Flipped classroom gives the decision-making power of learning to the students, and the students' learning of the course is more outside the classroom. The classroom has become a place for communication, discussion and problem-solving, which greatly improves the learning efficiency of the students, and the comprehensive learning ability has also been better cultivated. Based on the characteristics of many learning contents and short class hours of electrical and electronic technology courses in vocational colleges, the efficient learning efficiency of flipped classroom is very suitable. In practical application, teachers can combine project teaching method and task teaching method, so that students can carry out a lot of preparatory learning outside the classroom, consult materials and think about problems with projects or tasks, and then carry out efficient learning in the classroom Exchange and study. The flipped classroom teaching mode has a very good effect on the cultivation of students' autonomous learning ability and problem-solving ability. Shi Fugui, Wu Genzhong, Li Jianqing and others explored the application of flipped classroom in the teaching of electrical and electronic technology courses. The results show that this teaching mode can effectively improve students' autonomous learning ability and learning efficiency and better To master the content of learning is also welcomed by most students.

Appropriate information-based teaching methods can optimize teaching and improve teaching quality. In the course of teaching, we can effectively use the network teaching platform, micro class,

flash animation, simulation software and other information-based means to promote teaching. Network teaching platform can choose such as blue ink cloud class, super star learning, etc. by using such platform, real-time release tasks before, during and after class, effectively collect students' whole process learning data, scientifically evaluate and count students' learning effect. Using micro class before class and in the process of classroom teaching can expand students' learning time and space, realize that everyone can learn, everywhere can learn, and can learn from time to time, so that students can understand and master electronic and electrical knowledge more effectively, and improve learning efficiency. If the teacher in teaching a little boring and abstract electrical and electronic knowledge into a vivid flash animation, to some extent, can make the obscure learning lively and interesting. Computer simulation technology is an effective tool for students to learn the course of electrical and electronic technology. It has the advantages of high efficiency and safety. By using simulation technology to simulate the real circuit, students can see the circuit structure and operation more intuitively and clearly, learn the key and difficult contents of teaching well, and get twice the result with half the effort.

4. Conclusion

The innovation of electrical and electronic technology courses in Vocational Colleges puts forward higher requirements for teachers' teaching level. In teaching practice, the innovation of teaching mode and method requires teachers to have strong theoretical knowledge and practical ability, to absorb new knowledge, new methods and new ideas, and to combine with teaching practice, so as to push through the old and bring forth new ideas and explore innovation.

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