

Research on OBE Teaching Mode of Electrical Majors in Applied Undergraduate Colleges

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Abstract : With the development of my country's economy and the advancement of science and technology, there is an increasing demand for electrical professionals in society. At present, many undergraduate colleges and universities have launched electrical majors, hoping to train a large number of professional talents for our country. Although many schools have realized the importance of cultivating students' application ability, there are still some problems with the current teaching mode of electrical majors in undergraduate colleges. The OBE teaching model emphasizes student-centeredness, focuses on the degree of students' acquisition of knowledge, and sets the teaching model based on the actual needs of students to meet the needs of students and social development to the greatest extent. Therefore, the exploration of the OBE teaching mode of electrical majors in applied undergraduate colleges is of great significance for cultivating electrical professional talents and enhancing the employability of students.

Keywords : Applied Undergraduate Colleges; Electrical; OBE Teaching Mode

With the continuous development of educational concepts, many colleges and universities have realized that cultivating students should not only focus on the theoretical knowledge of students, but also focus on cultivating students' practical ability, so that they can effectively put into work in the future and apply what they have learned. The professional technicalities engaged in electrical majors are relatively strong, and students are required to have practical application skills. Under the traditional education model, judging the quality of the teaching model is more based on the strength of teachers, teaching materials, etc., and the curriculum setting also considers the demand for professional knowledge and the competence of the teacher, and the evaluation of the teaching quality is one-sided. Pay attention to the passing rate of students. The OBE teaching mode is student-centered, paying more attention to what the students have learned and the learning effect. In this way, it can be close to the needs of students as much as possible, subvert the original value orientation of "teacher, teaching material", and improve the curriculum teaching system. Through the OBE teaching mode, the actual needs of students in future employment can be taken into account to the greatest extent, and their practical ability can be cultivated to improve their comprehensive quality.

1. Exploring the importance of the OBE teaching model for electrical majors in applied undergraduate colleges

The full name of OBE is Outcomes-based Education. The Western Australian Department of Education defines OBE as: "an educational process based on the realization of student specific learning output." This educational concept truly breaks away from the traditional model of focusing on education input. It is to focus teaching on the output of learning results, pay attention to students' actual learning results and the practicality of the knowledge and skills learned by students, so that students can truly realize their own life value and social value. Electrical major is a very professional major. It requires not only sufficient theoretical knowledge, but also skilled hands-on skills. With the development of society, there is an increasing demand for electrical professionals in society, but not all electrical students trained in colleges and universities have the corresponding competitiveness

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when applying for jobs. When traditional colleges and universities are training students, they focus more on teacher explanations. Students passively listen to lectures and are not student-centered. If things go on like this, it will not be conducive to the improvement of students' application ability and the development of comprehensive quality. Therefore, applied undergraduate colleges and universities should adopt the OBE teaching mode, starting from the actual needs of students, and exploring scientific and reasonable ways to enhance the application ability of electrical students and enhance their future employability.

2. Exploring the strategy of OBE teaching mode for electrical majors in applied undergraduate colleges

2.1 Open a virtual laboratory

The OBE teaching mode emphasizes the learning results of students, and focuses more on student-centered, to enhance the practical ability of students. To cultivate application-oriented electrical talents, schools need to conduct a lot of practical teaching so that students can improve their application ability. The electrical equipment investment is relatively large, the number of equipment is limited, the number of teachers for practical operation training is sometimes not sufficient, and many high-voltage equipment are dangerous, and students cannot fully practice in the laboratory. Then you can open a virtual laboratory. Schools can build a virtual bionic platform to allow students to simulate practice circuits and other operations. Through such virtual exercises, students can apply the knowledge they have learned to actual operations and exercise their hands-on skills. At the same time, they can also discover the shortcomings in the operation, which require further explanation by the teacher. Deepen your understanding and mastery of the knowledge you have learned.

2.2 Focus on school-enterprise cooperation

For current schools, cooperating with enterprises is a very good way. With the development of the economy, companies need a large number of relevant talents, and schools also need to use the company's premises to exercise students. Enterprises have many application projects. These projects are really needed by society. The needs of the projects are also the needs and development hotspots of the current society. For students, they are very lack of knowledge in these aspects. There are many forms of school-enterprise cooperation, including personnel from companies coming to the school to teach, and students being able to go to the company for internships. Through school-enterprise cooperation, students are allowed to integrate with enterprises as soon as possible, understand the needs of the society, let students understand the hot spots of the development of the electrical industry, discover their own specific problems in practice, and make up for their own shortcomings. The OBE model emphasizes the practicality of the knowledge and skills learned by students. The electrical professionals trained based on the OBE model should meet the needs of the society. Therefore, the cooperation between the school and the enterprise can let the school understand the current social needs, so that the school can be timely adjust your own teaching focus, take the students' final learning output as the goal, enhance students' competitiveness in the talent market, and lay the foundation for their future work and future development.

2.3 Change the assessment standards

For schools or teachers, assessment standards have a crucial influence on them. Teachers often teach students based on assessment standards, and students also rely on assessment standards for learning. Therefore, the assessment standards here are not only the assessment standards for teachers, but also the assessment standards for students, all of which need to be improved according to the characteristics of electrical professionals in applied undergraduate colleges. Under the OBE teaching model, the school cannot only rely on the students' scores to make judgments when conducting assessments, but should focus on what the students have learned and whether the students apply the theory or practical knowledge they have learned to practice. Go with. Therefore, the application-oriented undergraduate colleges based on the OBE teaching model should focus on the student's learning output effect when setting the electrical professional assessment standards, rather than the teacher's teaching effect and teaching quality. The actual needs of students promote the improvement of the entire assessment standard.

2.4 Organize professional competitions

Electrical major is a relatively professional subject category. Most of the knowledge in it is not just a question or an understanding of a certain concept, and electrical majors are still dangerous in operation. It is more necessary for students to have a deep grasp of relevant knowledge. Therefore, schools should use virtual laboratories or other methods to organize professional competitions to improve students' professional quality. Through competition, students can improve their teamwork ability and improve their professional ability. The OBE model emphasizes that it is student-centered and student-oriented. Whether students can apply what they have learned to practical operations is very important. Through professional competitions, students can find out

what deficiencies they have in their usual studies, and play a role in checking for deficiencies. Students can further understand that it is not enough to rely solely on knowledge in books. They should study harder. Professional knowledge, so that we can build ourselves into electric application talents that meet the needs of the society.

2.5 Pay attention to students' sense of innovation

No matter what industry it is, innovation is very important. Now that the social economy is developing faster and faster, and the requirements for technology are getting higher and higher, schools should pay attention to cultivating students' innovative abilities when training, so that students can autonomously discover what problems exist in the current industry's production. How to solve it, cultivate students' ability to find and solve problems. OBE's educational philosophy focuses on cultivating students' individual excavation ability and independent thinking consciousness, and improving innovation ability on the basis of obtaining professional skills. However, relying only on the knowledge in books sometimes cannot effectively arouse students' thinking. At this time, teachers need to give full play to their guiding role. Electrical majors are sometimes also a major that requires innovation. With the development of society, my country's demand for electrical talents is definitely increasing. Electrical equipment and technical methods cannot remain unchanged. The main force driving these technological changes is the students who should be trained by undergraduate colleges. Therefore, schools should increase the cultivation of students' innovative abilities and cultivate their ability to discover, think about and solve problems.

3. Conclusion

With the development of science and technology, the society's demand for electrical professionals is increasing. However, due to the influence of traditional education methods, students trained by colleges and universities cannot be directly invested in their jobs. Therefore, colleges and universities should focus on training students. Vocational skills, adopting the OBE teaching model, emphasizing that starting from the actual needs of students, cultivating application-oriented talents, can better meet the needs of students and society. Many colleges and universities have realized the importance of cultivating practical talents under the OBE teaching model, but the current training model for this type of talent is still in the preliminary stage of exploration. How can we better cultivate applied electrical professionals? Still need experts, scholars and universities to conduct further research and attempts.

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