

Application Analysis of Electrical and Electronic Technology in Electrical Engineering Training

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Abstract: Electrical engineering training is an important part of the teaching of electronic technology, which is paid more and more attention by college teachers and students. However, due to the lack of a correct teaching mechanism, there are weak links in the application of electrical and electronic technology in electrical engineering training. This has certain obstructive effect on training students to become electrical engineering professionals. In order to achieve better application of electrical and electronic technology in the electrical engineering industry, university teaching researchers need to combine the current situation of the application of electrical and electronic technology, innovate the application methods, and devote themselves to exerting the application of electronic technology in electricity. Advantages in gas engineering.

1. Introduction

Applicability and practical adaptability are the greatest characteristics of electrical engineering. It is precisely because of the two characteristics of electrical engineering that all industries have a great dependence on electrical engineering. Teachers also pay more attention to the teaching of related courses in Colleges and universities. Therefore, in developing the teaching content of electrical engineering, we should fully combine the characteristics and advantages of electrical and electronic technology to train high-quality electrical engineering professionals for the society.

2. Overview of the Application of Electronic Technology

With the continuous improvement of science and technology level in China, the role of electrical engineering application in all walks of life is constantly improving. It has gradually become the core position in the field of science and technology, and has been applied in various high and new technologies. In other words, the continuous progress of electrical engineering marks the progress of science and technology in our country. Due to the great changes in people's living standards and living modes in the new era, the concept of electrical engineering application is also constantly innovating. It has gradually become widespread from the traditional, more limited application scope. Science and technology involving electronics and photons are part of electrical engineering, and this is where it is. In the environment, people have to give a high degree of formality to electronic technology. Perhaps in the next few years, electronic technology will become a guiding tool in life and work. Therefore, in view of the application of electronic technology in electrical engineering, colleges and universities need to carry out effective and pertinent teaching reform in combination with the training of electrical engineering, to promote the improvement of students' practical ability, to train electrical engineering professionals who meet the requirements of relevant enterprises for the society, and to realize the greatest value of running a university. The reason for strengthening students' application ability of electronic technology in the teaching of electrical engineering is that electrical and electronic technology is an important component of electrical engineering, which helps to give full play to the greatest advantages of electrical engineering. In order to become an excellent electrical engineer in the future, students must have the basic knowledge and practical ability related to electrical engineering, be able to flexibly apply electrical and electronic technology to the training of electrical engineering, and lay the foundation for the future employment development of students.

3. Problems in the Application of Electrical and Electronic Technology

Nowadays, although some achievements have been made in the training arrangement of electrical engineering courses in Colleges and universities, there are still some shortcomings, especially in the uncoordinated application of electrical and electronic technology in practice and theory, which is not conducive to the development of enabling activities of electrical engineering and hinders the improvement of students. Electrical engineering related skills and the ability to use electronic technology. Specifically, the inconsistency between theory and practice is reflected in three directions: the lack of rationality in the teaching content of electrical engineering courses, the lack of scientific and reasonable combination of theory and practice of electronic technology, and the lack of practical significance.

1). The teaching content of electrical engineering course lacks rationality. Mainly reflected in the inappropriate arrangement of electrical teaching content, did not grasp the key and difficult points of electrical engineering professional knowledge, lack of clear direction, resulting in students' professional knowledge and social needs are disconnected. In most colleges and universities, the practice teaching of electrical engineering specialty is usually carried out by such planning: for example, taking one week as the study of electrical engineering specialty, most colleges and universities arrange the first five days to fill in the teaching content in the theoretical way, while the design of practice and innovation is arranged in the last two days. Although this is indeed a teaching method combining theory with practice, in fact, colleges and universities do not really realize the proportion of theory and practice, because during the period of learning theoretical knowledge, students will feel nervous because of the numerous tasks, and the next seven students will be very relaxed because they only have two days, so they will take practical activities as their own. The rest time will not be given high attention, thus reducing the quality of teaching.

2). Lack of scientific and reasonable combination of theory and practice of electronic technology. In the practical teaching process of electrical engineering, college teachers are more inclined to explain students' theoretical knowledge. Whenever the practical activities are carried out, there will be relevant theoretical teaching. The purpose is to hope that students can apply the theoretical knowledge learned in the classroom to practice. This is a very correct teaching mode. However, in fact, most colleges and universities lack a correct teaching method combining theory with practice. They attach too much importance to practice and neglect the importance of theoretical knowledge. As a result, they can not advance synchronously and become the restriction of improving students' abilities.

3). Lack of practical significance. Nowadays, because most colleges and universities lack the necessary basic equipment in the practical teaching of electrical engineering, the training level of students is reduced, and ultimately the professional level and technical ability of students can not be improved. For example, the application of Electrotechnics and electronics technology in the practical teaching of electrical engineering, most colleges and universities only make students learn how to control and apply the circuit by simply configuring the training content of lighting circuit, but under the background of the development trend of high and new technology in the 21st century, the traditional circuit teaching method is too backward and lacks. Practical significance.

4. Analysis of the Application Strategies of Electrotechnics and Electronics Technology in Electrical Engineering Training

In this paper, the existing teaching problems in Colleges and universities are briefly summarized. Based on this, the author believes that in order to train excellent engineering professionals, colleges and universities need to think from multiple perspectives. The author puts forward some suggestions:

1). The compilation of textbooks should be strictly standardized. When choosing textbooks in Colleges and universities, individual teachers or responsible persons of relevant departments usually choose them separately, especially in Higher Vocational colleges. It is too one-sided to choose textbooks for electrical engineering courses, which is only a teacher's personal opinion. However,

the teaching practice of electrical engineering is the ultimate goal of teaching. It is devoted to training students to become high-quality applied technical talents. Therefore, the practical level of teaching materials should be emphasized in the selection of teaching materials. In addition, the selection process of textbooks should also be formulated scientifically and normatively. The selection of textbooks should be discussed through teacher discussion and combining with students' learning characteristics, so as to take into account students' interest in learning and the difficulty of the textbooks as much as possible. It lays a good quality foundation for students' practical activities and theoretical teaching in later period.

2). Scientific and rational integrated teaching mode of theory and Practice

Because the application of Electrotechnics and electronics technology in electrical engineering needs to be based on practical operation, it is necessary for colleges and universities to scientifically and reasonably formulate the integrated teaching mode of theory and practice when offering courses of related specialties. Teachers should abandon the traditional teaching idea of full classroom instruction and integrate new teaching ideas. They should make full use of the teaching methods of theoretical knowledge in the classroom in practical projects to improve students' practical operation ability and cultivate students' practical ability. At the same time, teachers should also consider students' differences in specific teaching, so as to teach students in accordance with their aptitude, according to the training objectives of electrical engineering, practice operation according to students' situation, avoid the phenomenon of too difficult practice or disconnection with theory, so as to promote the application of electrical technology in electrical engineering training.

3). Fully integrate the development needs of society and enterprises

The purpose of setting up electrical engineering teaching in Colleges and universities is to train students to become application-oriented professional and technical personnel, and help students better employment and development. Therefore, in the teaching of electrical engineering training content, we should fully integrate the development needs of society and enterprises, and set up subject-related teaching materials and equipment. Interest is the best tutor. When applying electrical and electronic technology to electrical engineering training projects, students' interest in learning should be fully taken into account. Only when students have a certain interest in electrical engineering training content, can they better grasp various modern electrical skills. In addition, in order to offer electrical engineering courses in Colleges and universities, more consideration should be given to the choice of practical projects, and the development of society and enterprises should be taken into account to help students understand more about electrical and electronic technology as far as possible.

5. Conclusion

To sum up, it is difficult to apply electrical and electronic technology in the practical training of electrical engineering, so there are certain requirements for students' comprehensive quality and ability. In order to ensure the efficient application of Electrotechnics and electronics technology in the electrical engineering industry, it is very important to formulate scientific and reasonable teaching plan and improve the construction of campus infrastructure in order to train high-quality and excellent electrical engineering professionals. Colleges and universities should also timely understand the development needs of society and train students to meet the needs of the society. The professionals who are required by the society and enterprises will play a higher role in the future electrical industry.

References

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