Implementation of Teaching Mode of Computer Network Technology Major in Higher Vocational Education

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Abstract: Computer network technology has played an irreplaceable role in all walks of life and the process of social development by virtue of its diversified advantages. Through the detailed analysis of the teaching of computer network technology major in higher vocational colleges, it can be found that some teachers obviously attach importance to theory and ignore practice in the actual teaching process. Therefore, through the continuous optimization and improvement of the teaching mode of computer network technology major in higher vocational colleges, this paper lays a solid foundation for further improving the comprehensive teaching ability of the major and students' professional quality.

1. Introduction

Computer network technology mainly refers to an interdisciplinary subject formed by the mutual penetration and combination of communication technology and computer technology. In the process of continuous development and practice of teaching mode, it has formed a knowledge system with high integrity and comprehensiveness, which is more practical and theoretical than other professional disciplines. For higher vocational colleges, the main purpose of setting up computer network technology courses is to cultivate a large number of compound talents with high professional skills, strong comprehensive quality, professional network management skills and network application and maintenance knowledge for our society. Among the courses of computer network technology, all the main courses are highly practical. Teachers must fully integrate theoretical knowledge with teaching practice and attach great importance to teaching practice. This is not only an effective way to ensure the training of high-skilled computer network technology professionals in higher vocational colleges, but also an important means to promote the high-quality development of network computer technology in China.

2. Strengthen the Establishment and Improvement of Practical Teaching System

Higher vocational colleges play an irreplaceable role in the process of cultivating high-quality practical professionals, and their position in China's education system is gradually rising. In the process of professional teaching in higher vocational colleges, we should not only correctly recognize and attach great importance to the significance of practical teaching at the ideological level, but also continue to combine modern ideas and diversified measures into practical teaching from the action level, so as to ensure the establishment and improvement of the practical teaching system of computer network technology major. However, through a detailed analysis of the current teaching situation of computer network technology major in some higher vocational colleges in China, it can be found that not all educators can attach great importance to the significance of practical teaching. Even if higher vocational colleges put forward the requirement to increase the proportion of practical teaching of computer network technology major, some teachers still do not change the wrong method of paying attention to theoretical teaching and ignoring practical education. As a result, although many students have a wealth of theoretical knowledge, they do not have the ability to flexibly use practical skills and can't meet the requirements of relevant posts in

future work.

In order to effectively solve this problem, higher vocational colleges should further optimize the traditional teaching system from a diversified perspective, fully infiltrate the principle of "integration of theory and practice" into the teaching of computer network technology, continuously improve the training system, and combine highly innovative and targeted training measures and training programs. With the goal of continuously improving students' computer network technology ability and comprehensive development ability, it is necessary to ensure that the core value of higher vocational education can be fully demonstrated through the practical teaching of computer network technology [1].

3. Actively Carry out Teachers' Academic Exchange Activities to Improve Teachers' Teaching Ability

Under the background of the overall improvement of the development level of network technology in China, the overall development of computer major has always maintained a steady state, and is moving towards a more and more perfect direction. For a long time, there has always been a certain gap between higher vocational colleges and ordinary colleges in terms of professional academic level and scientific and technological research ability. Whether teachers have high professional ability will have a direct impact on teaching quality and students' learning effect. As for the teaching of computer network major, there are many professional knowledge points involved, and the educational system has high complexity. Teachers themselves must achieve continuous development in order to provide assistance for students to fully learn and master relevant knowledge [2].

If higher vocational colleges want to ensure the comprehensive optimization of the teaching mode of computer network technology major, they should not only take diversified measures to enable teachers to establish the ideology of self-optimization and self-improvement, but also actively carry out academic exchange activities related to the teaching of computer network technology major inside and outside the school, and take targeted means to shorten the distance between teachers, so as to ensure that teachers can learn excellent teaching concepts and methods, enrich their own teaching experience, and integrate new educational concepts and ideas into the teaching of computer network technology major in the process of mutual communication. As a result, the innovation of the specialty teaching system can be fully realized. In addition, higher vocational colleges should also provide support to teachers majoring in computer network technology to carry out relevant education and teaching activities at the relevant levels of funds, equipment and channels, actively build a double-qualified teacher team, regularly organize teachers to carry out activities related to vocational training, and ensure that teachers can fully master the cutting-edge ideas and advanced skills of computer network technology, further improve teachers' professional knowledge reserve and educational ability [3].

4. Strengthen the Active Infiltration of the "1+1" Educational Concept

For most higher vocational colleges in China, the three-year education model is adopted. The main educational goal is to cultivate compound talents with high practical ability and comprehensive ability. Higher vocational colleges should focus on how to improve students' comprehensive practical ability [4].

Taking the actual teaching situation of higher vocational colleges as the starting point, it can be found that some higher vocational colleges concentrate the theoretical education of computer network technology major to the primary education stage, that is, to teach students the relevant major theoretical knowledge in the first grade. When all theoretical teaching activities are completed, students are usually directly organized to carry out practical exercises. The ratio of theoretical teaching to practical teaching is usually 6:4. It can be seen that although higher vocational colleges have made clear the overall focus of vocational education, in the process of implementing various teaching measures, they have always been unable to thoroughly solve the

problem that theory is greater than practice.

In this regard, higher vocational colleges should not only actively integrate the innovative teaching mode into the teaching of computer network technology, but also ensure that the "1+1" educational concept is fully penetrated. For example, after explaining the basic knowledge of computer network to students, in order to ensure that students can deeply understand and remember the contents of the knowledge, teachers can first lead students to digest relevant knowledge for a period of time, and then focus on 1-2 weeks to organize students to carry out practical training activities. On this basis, through the effective implementation of the project-driven education model and the school-enterprise cooperation model, students' practical awareness and practical ability can be actively trained. In the last academic year, higher vocational colleges should actively arrange students to carry out practice exercises, such as graduation design, comprehensive practice and other activities, guide students to transform all the professional knowledge they have learned in the past three years into practical skills and apply them to specific work, and find their own problems in the process of continuous transformation, so as to take corresponding optimization measures to solve relevant problems in time and further improve students' professional ability [5].

5. Ensure that the Assessment Method Adopted is Closely Combined with the Operation Practice

When higher vocational colleges assess the courses of computer network technology major, they usually focus on the written examination. In order to achieve good results in the examination process, students only recite a large number of boring and complex computer network technology theories and principles. They will forget the relevant contents as soon as they get out of the examination room. Even after learning all the courses of computer network technology major, they do not understand how to set up network IP and have no knowledge of basic network naming applications such as IP Config and ping [6].

In order to reverse this situation from the root, higher vocational colleges should fully integrate theoretical assessment and practical assessment in the process of teaching assessment of computer network technology major. In this process, the theoretical assessment content should account for 50% of the overall assessment. The final examination results involved in Cisco network training Ccna1-Ccna4 can be taken as the final theoretical assessment results, and the assessment results can be saved in the cloud disk as the theoretical knowledge basis for judging the final assessment results of students, so that the paperless examination goal can be effectively realized. The practical assessment content should account for 50% of the overall assessment. A virtual network environment can be built for students through the effective use of simulation software. Then, in combination with the specific assessment content, students are required to give full play to their theoretical knowledge and skills, independently configure the network in the virtual environment, and store the configuration results as the practical skill basis for judging students' final assessment results in the cloud disk. This way can not only further strengthen students' theoretical knowledge of computer network technology, but also greatly improve students' practical awareness and operational ability, so as to continuously improve students' professional quality [7].

6. Conclusion

The full implementation of China's educational reform measures has played a significant role in strengthening students' comprehensive ability, and students' quality in all aspects has been effectively improved. Especially in the level of hands-on operation and practical ability, most students can integrate the theoretical knowledge learned in the classroom into practical operation, combine their own actual cognition and mastered professional knowledge and skills, explain and analyze the problems encountered in practice. This is not only a qualitative leap for China's education system, but also proves that the various educational reform methods adopted are highly feasible and reasonable.

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