

# Problems and Countermeasures of computer network technology teaching in Secondary Vocational Schools

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**Abstract:** with the development of social economy, computer network technology has been continuously optimized and upgraded, and has achieved remarkable application results in various fields. At the same time, it is also in urgent need of a large number of high-quality computer network technology talents. Based on this, secondary vocational computer network technology teachers should undertake the teaching task of transporting high-quality talents for social development and industry innovation, so as to adapt to the trend of social development. Specifically, teachers need to explore effective measures to optimize the teaching of the course and build an efficient classroom, so as to meet the challenges and seize the opportunities, and continuously improve the teaching quality and efficiency of the course. Therefore, teachers need to invest more time and energy in curriculum innovation and teaching content enrichment, in order to help students consolidate basic computer knowledge and computer skills, and lay a solid foundation for their subsequent development. Based on the author's teaching experience, this paper briefly expounds the problems existing in the teaching of computer network technology course in secondary vocational schools, so as to put forward specific optimization strategies, aiming to provide reference and ideas for the teachers of computer network technology course in secondary vocational schools.

**Key words:** secondary vocational colleges; Computer network technology; Problems; countermeasure

Based on the development trend of the new era, the importance of secondary vocational education in the whole education and teaching system has become increasingly prominent, and is deeply concerned and valued by all sectors of society. Therefore, teachers of computer network technology courses need to take appropriate measures to teach students basic knowledge and computer skills, In addition, they should also exercise their practical skills and innovative spirit according to the job content and the needs of industry innovation, so as to lay a solid foundation for their subsequent adaptation to social life and docking work. Based on the limitations of various practical factors, teachers have many problems in the actual teaching process, which limits the steady improvement of the teaching quality of the course to a certain extent. In order to break through the current teaching barriers and improve the current teaching situation, teachers should conform to the current situation, based on the student-centered perspective, and based on the guidance of employment development, explore new teaching ideas and methods, introduce advanced technology and equipment, effectively promote the teaching reform process of computer network technology course, and ultimately cultivate talents for the development of the Internet industry, And optimize the teaching effect of secondary vocational computer network technology course.

## 1. Problems in the teaching of computer network technology in Secondary Vocational Schools

### 1.1 Lack of practical teaching content

Based on the influence of teaching conditions and objective factors, there are many problems in the teaching of computer network technology in secondary vocational schools, such as the curriculum system needs to be adjusted, and the practical teaching needs to be improved. Specifically, the practice teaching hours are short and the content of the practice course is simple. The practice teaching content is mainly carried out around simple routing and switching technology, and rarely involves infinite network technology, network security module, network maintenance and management module, which makes the theory and practice teaching of computer network technology course unbalanced, Finally, the expected practical teaching effect can not be achieved. The fundamental reason is that teachers do not pay enough attention to practical teaching. Therefore, teachers need to fundamentally change their teaching thinking and put theoretical explanation and practical teaching in the same teaching position.

### 1.2 Students' lack of interest in learning

According to the author's practical teaching experience, most students get rid of the tension before the college entrance examination after entering the secondary vocational school stage, but if they lack self-control ability or self-awareness, they are easy to become indulgent and lazy, which ultimately makes it difficult for them to concentrate on acquiring curriculum knowledge for a long time, making the quality of curriculum teaching poor. In addition, due to the practical, professional and abstract characteristics of the computer network technology course, most students have little interest in it, and it is difficult to devote themselves to the course learning, which can not effectively improve the teaching quality of the computer network technology course. Because it is difficult for most teachers to change their teaching thinking in a short time, they still use the traditional teaching methods to carry out teaching activities. In this way, it is easy to make the classroom atmosphere dull and boring, and ultimately unable to mobilize students' subjective initiative, and also unable to achieve the expected teaching results.

### 1.3 Divorced from practical application requirements

The purpose of setting up computer network technology courses in secondary vocational colleges is to teach students' professional knowledge and practical skills, so that they can apply what they have learned to practical exploration and daily life, so as to lay a solid foundation for their successful career choice. The curriculum teachers in some secondary schools have the disadvantages of emphasizing

theory and neglecting practice in actual teaching, which leads to the imbalance of the proportion of theory and practice teaching, and it is difficult to guide students to complete the knowledge transfer and internalization in practice, which not only affects the improvement of students' practical ability, but also reduces students' confidence in participating in the work. In addition, some secondary vocational schools do not pay attention to the teaching of computer network technology courses, and do not invest sufficient funds to purchase technology and equipment, so it is difficult to create teaching situations close to reality for students, making the whole teaching system divorced from the actual application needs, and unable to rely on the training base and practical equipment to help students consolidate practical skills and improve professional quality. Finally, it limits the all-round development of students.

#### 1.4 Teaching methods need to be innovated

The computer network technology course set up in secondary vocational schools has prominent practical, applied and contemporary characteristics. If teachers blindly carry out teaching activities with self-centered, it is difficult to improve the life and interest of classroom teaching. Therefore, teachers should choose appropriate teaching methods according to the characteristics of the subject and the needs of students, in order to stimulate students' internal needs and motivation to participate in classroom activities. However, according to the author's practical investigation, teachers did not actively introduce advanced concepts and technologies to carry out teaching activities, nor did they introduce the latest research results and scientific research trends in the field of computer to students, which ultimately made students in a passive learning state and unable to mobilize their initiative. Therefore, based on the particularity of computer network technology course, teachers need to optimize and innovate teaching methods according to students' learning status and cognitive levels.

## 2. Teaching optimization strategy of computer network technology course in Secondary Vocational Schools

### 2.1 Creating suitable teaching situation

In order to further improve the participation and activity of students' participation in the network technology course, teachers should create appropriate situations based on students' stage characteristics and interests, so as to stimulate their learning enthusiasm and motivation, attract them to immerse themselves, and continuously spread their thinking and expand their cognition. At the same time, in order to guide students to apply the knowledge they have learned to the exploration of practical problems, we should also select appropriate teaching materials and exploration tasks in the process of creating situations, so as to integrate curriculum teaching with practical problems and improve students' professional ability. For example, when explaining the functions of routers to students, teachers can first ask students to observe and record the brands, models and functions of routers used at home, and make detailed records. After that, teachers need to encourage them to talk about the parameter setting and use function of the router in class, so that students can explore and think in the life situation. Finally, teachers should ask students to complete router exercises to help them master basic knowledge and operating skills in the process, and ultimately improve their computer literacy. In addition, teachers can also create problem situations, such as requiring students to troubleshoot with the help of a faulty router. They are required to share with team members and Tao Gao on the basis of collecting, integrating and summarizing network resources, to explore the best solution to the problem, and explain the principles and methods of troubleshooting in the class, which can finally activate students' thinking, Inspire students' potential.

### 2.2 Highlight students' classroom status

First, teachers need to understand students' learning status, cognitive level and reception level by combining students' classroom response and after-school feedback, and can also understand their learning progress and learning difficulties through one-on-one communication, so as to fully understand the differences between students. On this basis, teachers need to fully consider the learning bottleneck and learning needs of each student, and combine with the basic question type thorough examination to reasonably stratify students, so that students with solid foundation can drive students with weak foundation to make progress together. For example, for students with learning difficulties, teachers need to have an in-depth conversation with them to understand their learning difficulties and obstacles, so as to delimit the scope of key and difficult teaching, and finally continue to encourage them to make bold attempts to improve themselves and increase self-confidence in continuous learning. Teachers need to fully recognize the dominant position of students in the classroom, timely discover their emotional changes and small progress, and carry out targeted teaching while continuously encouraging them, so as to ultimately improve their learning ability. Second, teachers should also reform and innovate the practical teaching part according to the students' practical performance on the computer, explore the teaching methods and modes that meet the characteristics of students' stage, and formulate practical goals and plans according to the actual situation of students, and finally adopt scientific and effective teaching methods to improve the teaching quality of the course.

### 2.3 Improve practical teaching content

In order to promote the teaching reform of computer network technology course, teachers should collect and screen high-quality teaching materials, aiming to strengthen the practice teaching, improve the curriculum system, and ultimately promote the all-round development of students. Therefore, teachers can put theory and practice teaching in the same teaching position, and constantly improve the curriculum teaching system, so as to improve the integrity and level of the curriculum. When setting up the practical teaching part, teachers should include the practice content of basic skills, professional skills and post comprehensive ability. When carrying out practical teaching, teachers need to design teaching programs and plans around practical modules, so as to control the pace of practical teaching, fully highlight the role of practical teaching, and continuously improve students' comprehensive technical practice ability. In order to effectively highlight the applicability and practicality of the practical teaching of computer network technology course, teachers need to choose

appropriate teaching cases around the practical content, and carry out the practical teaching from simple to difficult by setting different difficult tasks. For example, when teachers explain the relevant content of website design to students, they need to guide students to design website functions and layout around a certain theme, in which teachers can set it as a practical project, aiming to further improve students' technology application ability and enrich their practical experience. For courses with special requirements for practice environment, secondary vocational school teachers can try to introduce simulation software or virtual training platform to assist teachers in completing practical teaching tasks.

#### 2.4 Improve the practice evaluation mechanism

Teachers of computer network technology course need to further enrich teaching evaluation standards and innovate teaching evaluation methods, aiming to improve the comprehensiveness and fairness of teaching evaluation, and finally give full play to the application value of teaching evaluation system. Generally, in order to comprehensively evaluate the teaching effect of computer network technology course, students' evaluation and teachers' evaluation can be carried out. First, in the process of student evaluation, teachers need to integrate theoretical tests with practical projects, so as to investigate students' ability to apply knowledge and skills. In addition, teachers should integrate students' classroom attendance, homework completion, classroom test results and group performance into the teaching evaluation system, so that they can complete the process evaluation while paying attention to the result evaluation. It should be noted that teachers should properly grasp the proportion of process evaluation and result evaluation, in which process evaluation accounts for 60% and result evaluation accounts for 40%, which aims to emphasize that students should pay attention to daily performance, carefully complete each task and solve each problem, and ultimately promote the all-round development of students. Second, secondary vocational schools should also conduct a comprehensive evaluation of teachers' curriculum teaching ability, and should carry out teacher evaluation according to the principle of developmental evaluation, in order to promote the further development of their professional ability. Secondary vocational schools need to develop different teaching evaluation indicators according to the characteristics of the curriculum, so as to objectively and impartially evaluate teachers, and finally get scientific and comprehensive evaluation results, so as to further strengthen the teaching force of computer network technology.

### Conclusion:

In a word, from the perspective of modern education reform, secondary vocational schools need to take novel and effective measures to promote the process of computer network technology curriculum reform, which can be achieved by creating appropriate teaching situations, highlighting students' classroom status, improving practice teaching content and improving practice evaluation mechanism, Improve the quality of computer professionals training in secondary vocational schools.

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