Exploration of Teaching Reform of Computer Network Course Facing Internet+ Innovation

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Abstract: As a major with great potential in various development industries, computer network courses have great development potential in the Internet. It was originally established for the development of the Internet, which requires students studying this major to fully understand the Internet. College students are the backbone of the development of the times, and higher vocational education is an important part of my country's basic education. Therefore, in higher vocational education, the current situation of computer network education needs to be taken seriously. This article describes the current situation of computer network course education, and discusses the teaching reform of computer network course in higher vocational education.
Keywords: Internet+; Computer Network; Innovation; Teaching Reform

1. Introduction

The new round of curriculum reform is gradually and deeply implemented, and the reform of the computer network curriculum is also underway. The computer network course education in the traditional education model has some drawbacks. If it cannot be reformed in time, the teaching quality of computer network courses will be affected to a certain extent, which will hinder the better development of students. Therefore, under the background of "Internet+", it is urgent to actively carry out the teaching reform of the new computer network.

2. Current problems in the teaching of computer network courses

The premise of teaching reform is to find out the problems in the current situation. Only by finding out the cause of the disease can the focus be solved, so that the reform of computer network courses can be carried out rationally and efficiently.

2.1 The teaching concept is backward and difficult to adapt to the development of vocational education

Computer network courses require a lot of teaching practice in the education of higher vocational colleges. This requires teachers to apply the basic concepts of vocational education to practical teaching for a long time, and to promote and cultivate students' professional ability and comprehensive quality as the main goal of practice. However, the current test-oriented education background makes the actual development of teaching deviate to a certain extent from the teaching goals set before. Once teachers fully focus on the improvement of test scores in their teaching practice, the design and development of all their activities will also focus on the specific details of the test. In addition, taking exam-oriented education as the original intention of teaching design and taking grades as the standard for evaluating teaching quality is also one of the widespread drawbacks

in current teaching evaluation. Therefore, under the influence of exam-oriented education and the constraints of traditional teaching systems, the teaching concepts and models of computer network courses in higher vocational colleges are behind the times, and it is difficult to adapt to the requirements of computer network courses in the new era. This has caused a serious deviation of teaching thinking and teaching mode, and the lack of uniqueness of students. Even though their test scores are very satisfactory, the serious lack of professional skills prevents them from adapting to the needs of society.

2.2 Too much emphasis on teaching progress, lack of summary and reflection process

The Internet brings people not only the convenience of life, but also a leap in work and study efficiency. Such fast-paced learning and living habits also have an impact that cannot be ignored on computer network courses. In the teaching process, blindly catching up with the teaching progress will cause great pressure to students. In order to focus on cultivating students' test-taking ability, the teacher will leave a large number of exercises in class and spare time. Students who blindly immerse themselves in the question will lack the summary and reflection on knowledge. In fact, in the correct teaching rules, students can make enough summaries and reflections to make them grasp the level of knowledge further. To learn the new through reviewing the past, teachers' teaching and training should pay more attention to this point. Students' study habits and professional skills can be further improved through reflection and summary of classroom knowledge. Therefore, teachers need to abandon the stylized teaching model that is bound by progress, and instead explore new models for reform.

2.3 The training direction is not clear, the curriculum system is worth thinking about

Computer network courses cover a wide range of subjects. As a comprehensive subject, it is closely related to many majors. However, if the training direction of the major cannot be clearly determined, the students will be confused about the future work. The unclear training direction will directly lead to the unreasonable setting of the curriculum system. Some professional computer courses take up more hours, and students are full of interest in learning subjects such as computers that are easy to learn and fun. However, the computer theory course occupies less time and is relatively boring, which will result in unsound theory of students.

3. Teaching reform methods of computer network courses

3.1 Reform of classroom teaching mode

Computer network courses are closely related to the development of the Internet. The development of the Internet has led to a new trend, the "micro" trend. Micro-classes, micro-videos and other "micro" products were born. The emergence of "micro-classes" and flipped classrooms has injected new vitality into new-style classrooms. As the frontier development trend and main driving force in the new-style education reform, the form of "micro-class" has the characteristics of short and concise, clear purpose and clear learning objectives. It is not a video of a lesson, but an explanation and recording of a certain knowledge point as a video. "Micro-classes" meet the needs of new-style teaching for individualized and autonomous learning. Flipped teaching is to exchange the traditional teaching relationship, reverse the teaching relationship between teachers and students, and learn through students' inquiry. Its purpose is to learn independently and actively for students. The combination of "micro-class" and flipped teaching has brought new breakthroughs to the teaching model. This combination is a break and reshape of the conventional model.

The combination of "micro-class" and flipped classroom teaching mode applied to teaching reform can help cultivate students' autonomous learning ability. In addition, it is helpful to improve students' independent learning ability, cultivate practical ability and solve students' different problems. "Micro-classes" and flipped classrooms have allowed teachers to get rid of the traditional role of professors and gradually transform into participants who guide students to learn. When students study, use effective forms to gradually stimulate students' desire for exploration, and finally achieve the goal of gradually getting rid of dependence on teachers. With the ultimate goal of establishing a correct learning concept, students will improve their vocational skills on the one hand and provide a solid foundation for sustained learning in the future.

3.2 Make full use of network resources

Efficient use of network resources can enable computer network course teachers to obtain abundant teaching resources and formulate reasonable computer network course teaching tasks, thereby improving computer network teaching programs.

College computer network teachers can also combine years of teaching experience to organize open learning activities, integrate and connect learning resources with the help of network information, and share them with college students. This can create a good learning environment and learning atmosphere, and improve students' computers Network learning ability. In addition, the integration of computer network learning resources can provide reliable resource support for the formulation of computer network teaching plans, and can also avoid the waste of learning resources.

3.3 Practice training reform construction

The reform and construction of computer network courses need the attention of the school and the investment of manpower and material resources to build a new training base. This kind of training base conducts training based on social facts, get rid of the purely outdated simulation activities and simulation training in the past, but learn and learn in reality. Schools should negotiate and cooperate with society and enterprises, connect society with schools, and bring fundamental reforms to the practical activities of computer networks.

3.4 Build a mature network system

A sound Internet architecture can make full use of the application advantages of the "Internet+" educational background. In addition, colleges and universities should conform to the requirements of the development of the times and constantly look for teaching methods of computer network courses adapted to the times, so as to establish a more complete computer network course information database, and provide a solid foundation for Internet technology to face the world. Colleges and universities can also use the network information platform to subdivide the teaching of computer network courses and divide them into different modules, such as method modules, evaluation modules, feedback modules, etc., to encourage students to use the network system to deal with problems in computer network courses. To enable students to accumulate more experience in network information technology, to become familiar with the application of the "Internet+" educational background, and to promote the reasonable and effective completion of the computer network course teaching plan.

4. Conclusion

The cultivation of computer network talents requires reform and exploration of educational models, which requires schools and educational undertakings to spend a lot of time and energy. Aware of the various problems existing in the existing system and the necessity of reforms, the reform and exploration of the educational model are carried out. The teaching reform in the "Internet+" era is a student-centered reform. Teaching methods are more rapid and diverse with the support of information technology, and resource sharing also brings a qualitative leap in teaching content. Gradually cultivating students' enthusiasm for autonomous learning and helping students gradually develop good learning habits is the key to continuously improving the quality of computer network teaching in higher vocational colleges. In this process, teachers should continue to strengthen their own awareness of reform and innovation, and schools should also encourage and pay more attention to teachers to encourage teachers' innovative reform behavior.

References

1. Chen Y, Zhang Q, Wu Y, *et al*. Computer network curriculum reform based on the cultivation of innovative thinking. Education Teaching Forum 2020; (29): 366-368.
2. Feng C. Humble opinion on the innovation of teaching methods of computer network courses in higher vocational colleges in the era of big data. China New Telecommunications 2020; 22 (13): 204.
3. Wang D. On the service issues in internet trials. Frontiers of Social Sciences 2020; 9 (6): 899-904.
4. Lan J. Research on the reform of computer network courses oriented by cultivating innovation ability. Modern Vocational Education 2019; (35): 174-175.
5. Tang C, Chi W, Li L. Analysis of the marginal effect of Internet medical treatment from the perspective of value theory. Chinese Health Economics 2020; 39 (10): 9-12.