

Research on Teaching Reform of Computer Basic Courses under the Mode of "Internet +" Applied Talents Training

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Abstract: With the popularity and rapid development of the Internet, computer network technology has been valued by major technology companies. The rapid development of the Internet is inseparable from computer network technology, so it is also a basic skill that contemporary college students need to master. In the process of teaching in different colleges and universities, there are still certain problems, and the national curriculum reform has been in full swing. In this paper, the course teaching, the various contents of the course are studied, and the teaching reform and practice of the course are studied and discussed.

1. Introduction

All walks of life in today's society require their on-the-job personnel to be familiar with the knowledge and skills of the profession, and to be able to use computers to solve some practical problems. How to improve the teaching level of computer-based courses in undergraduate colleges so that students can meet the social development of computers the requirements of operational technology are the primary problems currently faced. Since 2002, the teaching model of computer basic courses has not changed, and it has been used until now. The teaching methods are course explanation, computer practice and semester assessment. Computer teaching the planning is taught in the order of the chapters. The teaching process is mostly based on theoretical explanations and case teaching. The teacher will demonstrate the examples once again, and the students will imitate them once again. If they encounter difficulties, the teachers will repeatedly explain them several times. This teaching mode Under the classroom teaching has become dull and boring, and the students' initiative and enthusiasm have not been exerted, which has greatly reduced the teaching effect. After the school was promoted in 2010, the number of students increased further, and the computer level of students was uneven, especially the computer foundation of the students of science and science. The difference between knowledge and operational skills is more significant. In this situation, Reform crane foundation courses imminent.

2. Teaching status

Theoretical teaching and practical application are seriously derailed. Students feel that the content is abstract and boring in the process of learning. It is difficult to relate the theoretical knowledge learned and the practical application. Students have certain difficulties in combining concepts and principles with practical aspects. In the teaching mode, students lack sufficient interest. The associated knowledge of computer network courses is very much, and there must be certain computer and communication related basic knowledge to understand and master. The neglect of the communication principle, the internal relevance of the computer network is not thorough, and it is also affected by the schedule. By the end of the semester, many knowledge points will jump over and talk, students will not be able to fully have a full understanding of the structure, it is more difficult to apply the knowledge they have learned, and ultimately only make students feel that the book is very thick. I learned a little bit of knowledge. Of course, these shortcomings and current situation in teaching must succumb to the failure of students in the basics of computer networks. This is why national colleges and universities should deeply reflect and reform in the course reform.

Due to the constraints of teaching content and conditions, some colleges and universities do not

pay special attention to the experimental part. They arrange less class hours, and often focus on the training of network equipment and configuration operations. This puts obstacles in improving students' ability. At the same time, the subject and planning of the experiment were not strong. When the experiment was done, the students did not know what was learned in the experiment. The overall experimental thoughts were not understood, and there was no planned study for the whole experimental class. The content organization is arbitrarily large, and the students only set the network configuration commands, but they do not understand and grasp the experimental results after the configuration. Teachers fail to take into account the mistakes students may encounter in the experiment. Many times when students encounter problems and mistakes, they cannot experiment in time. This will reduce the participation and interest of students, and the quality of teaching. Not guaranteed.

The selection of textbooks is also very important for learning computer networks. It is well known that the current technology update is very rapid. A textbook that cannot keep up with the times will derail students and the latest technology. Nowadays, the computer network teaching materials of some colleges and universities are used year after year, and the experimental textbooks are not updated all the year round. This way, students still need to learn a lot of knowledge when they accept work. This has a chain-breaking effect on the cultivation of students and should be avoided.

3. Curriculum reform in the basic knowledge phase and the application phase

The mastery of computer basics is a gradual process. To cultivate students' information literacy and information skills, students should have a solid foundation, and thus improve their information expression ability, information exchange ability, information search ability, etc. Students can learn independently. Have a certain sense of innovation and application ability, can skillfully use computer technology in the future work and life. For this reason, the computer curriculum reform focuses on the cultivation of information literacy and information ability, the original computer basic course system and knowledge structure. It is no longer possible to adapt to the needs of today's social development. Reform is imperative. Considering the specific situation of our school in terms of curriculum, we will open an elective course as shown in Table 1. This table classifies computer basic courses according to knowledge modules. The chapter supplements the course. The knowledge structure of the basic teaching of computer is divided into five modules: computer hardware system, computer program design foundation, multimedia application technology foundation, computer network technology foundation, database technology and application, and corresponding supplementary courses are given.

Design a unique computer-based project-based training guide. Students should be proficient in computer skills commonly used in practical jobs, and have the ability to use computer networks to extend learning. Because computers are a course that emphasizes practical operability and skill teaching. Therefore, the focus of teaching should not be on theoretical knowledge, but on training skills. In order to cater to the application-oriented talent training program of our school, the reform of the application phase of the computer-based curriculum is based on "project-centered and cultivate applied talents". The concept of designing a computer-based project-based training guide for science students in this school. The book should fully consider the actual situation of science students in our school, and combine the computer operation skills commonly used in practical jobs to design targeted projects. Test. Features of the project-oriented training guide: 1 should pay attention to the cultivation of students' application ability. The content of the project should meet the needs of primary and secondary school teaching and corporate office, so that students can be qualified to work. 2 Try to design projects that are of interest to students. Encourage students' enthusiasm for learning. 3 Project content should be related to the development of computer technology Step. According to the actual situation of our school, the second grade students generally open the course "Computer Application Technology Foundation", make full use of the school's hardware and software resources, according to the characteristics and actual needs of the sophomore science students, the content of the experimental guide book is divided into Seven major

parts: WindowsXP system operation, word document layout, Excel spreadsheet data processing, slide production, computer network foundation, Access database operation, multimedia production.

Development of network teaching platform. With the development of computer technology, the network has become an indispensable part of people's learning, work and life information. Using the network can provide a communication platform for teachers and students in computer basic course teaching. Taking classroom teaching and network teaching The combination of teaching methods, the construction of a computer-based network teaching platform. The content of the website mainly has two modules: student module, teacher module. Students can conduct simulation tests, view simulation test evaluation, submit, view and download jobs, and give Teacher's message; teachers can upload handouts and homework assignments, view and evaluate test results, collect and analyze test results, and view and respond to student messages.

4. Teaching practice

According to the focus of the course, adjust the ratio of various types of questions in the test paper, and adopt a variety of scoring methods, such as usual performance, mid-term results, final results, experimental class scores and research results. As well as the higher-level examinations, the actual assessment of the subject, etc., objectively and realistically reflect the students' learning situation of the course.

Conduct a market survey. Investigating some technology companies, including Huawei and ZTE, to identify the market's demand points and shortcomings, and consciously carry out in-depth reform of applied undergraduate courses, which is the most direct way to cater to the market. Promote cooperation between enterprises and schools. Our school has a long-term cooperative relationship with ChinaSoft International. Students study in the theoretical courses at the school, and finally go to the enterprise for practical training. In this way, when students enter the society, they can better meet the market needs and respond more easily to the work. Enterprises, students and schools will maintain their vitality. Student communication promotes improvement. Revisit the graduates who have already participated in the school, exchange work experience, let them talk about the latest technology of the computer network outside, and need to improve. At the same time, the students who have not graduated will have a discussion about their degree of acceptance and interest and suggestions for improvement. If necessary, you can consult with relevant people. This is of great benefit to teaching reform and practice and must receive sufficient attention.

To adjust and optimize the experimental content, the proportion of confirmatory, design and comprehensive experiments should be combined with theory and practice. Clarify the core knowledge content of the experimental course and analyze the computer network system. Finally, select the more important teaching contents such as the transport layer, network layer and data link layer to design the experiment. The core has four aspects: the idea of cultivating the hierarchical architecture of computer networks; mastering the basic principles of data communication; analyzing classical and practical network protocols; analyzing typical computer network architectures and network protocols, and finally allowing students to cultivate various ability. The applied undergraduate is mostly an independent college. The students are characterized by a relatively weak English foundation. In the experiment, there are a lot of vocabulary that are not commonly used in daily life, such as GLOBAL, Routing, Static, RIP, VLAN Database, etc., so in the experiment, students will always encounter difficulties again and again, which is applicable to the application type. Undergraduate students are a big obstacle to learning technology. The English and various abbreviations appearing in the commonly used simulation software are summarized, and the identification and function of the experimental software are systematically made. Only in this way can we carry out experiments smoothly. In the experimental class, students should clarify the purpose of their experiments, theoretical knowledge points, experimental content, experimental focus and operational difficulties, assign team members and pay attention to the mix, in order to improve team cooperation and organizational skills. . At the same time, students should be encouraged to ask questions and cultivate a special atmosphere of applied undergraduate courses to make a solid foundation for future positions.

5. Conclusion

In view of the current society's demand for college students, the reform of computer-based courses must focus on the application-oriented talent training objectives, combine existing software and hardware equipment and network resources, continuously deepen the reform of the curriculum system, reform the curriculum, and mobilize students. Enthusiasm, continuously strengthen students' comprehensive application ability, and lay a solid foundation for students to develop into application-oriented talents.

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