

## Analysis of the Current Situation of University Computer Teaching and Exploration of Reform Measures

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**Abstract:** Computer course is an important part of higher education. As a basic course, it will be opened in all majors, which is also determined by the current social reality. In the information age, no matter what kind of jobs students will go to in the future, they need basic computer skills. In this context, this paper analyzes the existing problems of computer courses in colleges and universities, and puts forward some solutions, hoping to bring some useful reference to computer teaching in colleges and universities.

**Key words:** Secondary vocational school; Computer courses; Reform in education

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Since the popularization of computer and Internet, people are more and more dependent on computer, and all aspects of production and life are inseparable from computer. As a basic course, the main teaching goal of computer course in colleges and universities is to let students master some basic principles and operation methods of computer, so that they can use the information technology knowledge they have learned to solve practical problems. At present, colleges and universities pay more and more attention to computer teaching, students' computer application level and learning consciousness should be significantly improved, but generally speaking, there are still many problems, and the reform is imperative.

### 1 The existing problems of computer teaching in colleges and universities

#### 1.1 Students' computer ability is not balanced.

Computer course is different from other courses, it is more practical, students in daily life can learn computer knowledge, master the basic operation of the computer. This also causes the students' computer application ability to be uneven. Some students are crazy about computers. Before they enter colleges and universities, their computer operation skills have been quite high; There are also some students who are not very interested in computers, and they have less research and Exploration on computers in their daily life, so their computer operation ability is relatively weak. In college computer basic class, students with different basic knowledge learn the same knowledge. Some students feel that the teacher's explanation is too simple to arouse interest; Some students feel that it is too complex to understand and use, which is not conducive to improving the quality of computer teaching in colleges and universities.

#### 1.2 Unreasonable distribution of theory and practice courses

In colleges and universities, the problem of insufficient practice class hours of basic computer courses is particularly prominent. In addition, coupled with the single method of practice teaching, students can not raise their interest in learning computer courses, and they can not effectively master the

theoretical knowledge of the course. Due to the strong practicality of computer, it requires learners to study the operation logic and basic principles of computer through practical operation. It is not conducive for students to master the basic knowledge of computer, affect the development of students' practical use and operation ability of computer, and can not effectively achieve the teaching goal.

### **1.3 The content of teaching material is old and the teaching method is single.**

The content of computer course must be updated in time, because computer science and technology are constantly developing and updating. But at present, the updating of college computer teaching materials is relatively slow, some of the contents in the book are obviously out of date, and the compilation and publication of teaching materials are difficult to catch up with the development of the times. At present, the teaching method of computer basic course is mainly based on teaching materials, through explaining theoretical knowledge, demonstrating various operation steps of computer and software, and combining with practical operation. Students inevitably feel tedious, boring, and gradually lose interest in learning.

### **1.4 The teaching content of computer basic course is not suitable for the major.**

The emphasis of computer basic course is to improve the passing rate of examination. The teacher pays attention to the knowledge itself, but neglects the combination with students' major. Different jobs in different industries have different requirements for computer ability. For example, students majoring in liberal arts mainly focus on word processing, information processing, etc; Science and engineering students are more focused on information technology, communication technology, network technology, data processing, etc; Art majors need to master some common office software, multimedia production and so on. If we do not pay attention to combining the characteristics of various majors, and continue to adopt a unified and solidified teaching mode and teaching content for students, the students' interest is not high, and the teaching effect will not be very good.

## **2 Reform strategy of computer course in colleges and universities**

### **2.1 Modular teaching method in which students is the main body**

Some computer courses are relatively simple, and most of the students have a foundation. If the teacher explains them repeatedly in class, it is likely to waste time and reduce the teaching efficiency. In order to solve this problem, it is necessary to introduce the modular teaching method into the classroom. Modular teaching method belongs to a hierarchical teaching method. Under this teaching method, the course content is divided into modules, generally basic modules, strengthening modules and expanding modules. The knowledge module is clear, the students' logic is clearer, and the learning efficiency is higher. Modular teaching method takes students as the center, divides knowledge modules according to students' learning and thinking modes, and helps students improve their understanding of knowledge. Therefore, as a new teaching method, modular teaching method is necessary to be introduced into teaching. Under the modular teaching method, teachers should first divide the course content into different modules, such as the division of computer principle course, the division of OSI reference model and network security, tcpip protocol layering and other contents into basic modules, the division of packet switching and circuit switching into Strengthening modules, and the division of experimental course "grasping data packet and viewing TCPIP layering" into expanding modules. Students choose their own learning module to learn. Because the knowledge module is clear and the learning task is clear, students are more clear about their weak links in the process of learning, and then make targeted learning plans for themselves, so that the classroom becomes efficient and interesting.

### **2.2 Applying blended teaching and teaching methods keeping up with the times**

The selection of teaching methods must keep up with the pace of the development of computer science, and the teaching content must be timely and constantly supplemented and updated. Teachers should constantly practice and innovate, integrate

information teaching technology, build network teaching platform, and effectively integrate traditional teaching methods and information teaching means. Teachers can integrate into the hybrid teaching mode. Some important class hours are taught face-to-face by teachers using traditional teaching methods. Simple knowledge can enable students to do self-learning. They can watch learning videos and do online tests on the network learning platform for self-learning. The network teaching platform can provide more learning materials for students, and some key and difficult teaching teachers can share with students through the platform, so that students can consolidate their learning. In addition, teachers can also provide online Q & A and evaluate the students according to the content of the chapters, and include the assessment of online learning into the total assessment of final scores. This can not only make up for the shortage of computer basic course hours, but also provide students with more learning time and learning opportunities, and supplement the key and difficult points that the classroom did not understand. At the same time, it is also helpful for teachers to understand students' learning situation and provide more effective guidance for students. At the same time, WeChat can be used to create WeChat official account for computer knowledge sharing. Students often push some common computer knowledge, practical knowledge, practical skills and knowledge of test points to students. Students can learn selectively according to their weak links, so as to improve their learning efficiency and broaden their knowledge.

### **2.3 Diversify the teaching content and strengthening the construction of curriculum development resource library**

Due to the lack of teaching resources, less available forms of teaching, single knowledge structure and different majors of students, students are not willing to learn the knowledge of this course if they can't learn useful computer knowledge for their majors. Therefore, in teaching, teachers should expand the textbook content and make the teaching content diversified. In the teaching of computer basic course, the classroom can make different teaching plans and choose different teaching contents for different

majors. According to the professional direction, increase the use of network and web page production, multimedia technology, etc. Of course, it is difficult to implement in the computer basic class, where the amount of class hours is relatively tight. Therefore, we can use the network platform to build the curriculum development resource database, classify and integrate the curriculum resources through the network platform, and combine the learning content of computer basic course with students' majors, and with the future industries and posts of students. In addition, we should collect more learning resources and software, realize network sharing, construct and expand resources, and diversify the types of resources. Students can choose to study independently according to their own needs, which not only realizes the students' mastery of basic computer knowledge, but also can learn more practical operation skills combined with their own majors.

### **3 Conclusion**

Information technology course is produced with the development of computer technology. Nowadays, information technology is a basic course for students to adapt to the future study and work, and its position in teaching is more and more prominent. Teachers should aim at the learning characteristics of vocational school students, combine with advanced teaching methods, actively carry out teaching innovation, stimulate students' learning enthusiasm, improve students' ability to use computers, and then complete the teaching goal of computer in colleges and universities, so that computer teaching can truly serve students' life and work.

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