

# *On Innovation of Course Education and Teaching of Computer Applications in Contemporary Universities*

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**Abstract:** Driven by the information age, courses of Computer Applications in universities have become more and more important. Several of colleges and universities have added computer-related courses and paid more attention to courses of computer applications. Science and technology and information are constantly changing the world, and more people need to understand and study the courses to really use information in practice. All major colleges and universities are increasing the platform and courses for students to learn computer knowledge, but the course teaching of Computer Applications in some schools cannot meet needs for the rapid progress of informatization. Therefore, contemporary universities need to innovate computer application courses.

## 1. Introduction

As information technology develops rapidly, the subject of Computer Science and Technology has been popular. Most schools have offered computer-related courses, and more and more students choose to study computer-related knowledge. However, since the time for teaching of computer-related courses is limited and teachers are lack of practical experience, there are still some shortcomings in the teaching of computer-related courses. Therefore, many educational scholars and professionals continue to look for better ways to improve the teaching efficiency of computer-related courses. In addition, many schools have wrongly grasped the key direction of computer teaching. They focus on the theory instead of the application. At present, the course teaching of Computer Applications needs to be greatly changed and innovated.

## 2. The characteristics and situation of the course teaching of Computer Applications

### 2.1 The characteristics of course teaching of Computer Applications

In the era of comprehensive informationization of big data, college students can basically master simple computer operations easily, and many students have received certain computer-related courses as early as junior high school, so they have certain foundation for learning computer-related knowledge. However, the course of Computer Applications in the university are not simply the use of computers, but more about learning the technical application of computers. Students are able to solve many problems and learn more knowledge through computers. Universities are rich in teaching resources, and each student can practice independently, because the school can provide a

sufficient number of equipment for students to study, and the teachers also have high computer professional quality. Another notable feature of university computers courses is the understanding and application of big data. Big data has four characteristics, namely mass, diversification, high speed, and high value. Big data is mainly to organize and analyze all kinds of huge information, that is, to use unified means to solve more complex problems. And big data are closely related to computers, and they are indispensable. Computer learning also needs to pay attention to the mastery of big data <sup>[1]</sup>.

## **2.2 Current situation of course teaching of Computer Applications**

At present, in computer teaching, teachers demonstrate how to operate computers in the classroom, and many students practice the operation in the classroom. But teachers spend most of times in explaining the operation of computers in the class, and students have little time to operate computers. In addition, there is little interaction between teachers and students in the class, and they hardly interact with others. It is also difficult for the teacher to pay attention to the learning situation of each student due to the large number of people who are educating, so they cannot help every students to solve the difficulties in computer operation. And the main content of computer teaching is from teaching materials, which is relatively limited. Teachers seldom expand the knowledge in the class, but just explain the knowledge mechanically. Nowadays, the requirements for information technology talents are extremely high, but the current computer teaching and talents cultivation is difficult to meet the requirements. Therefore, the computer teaching needs to be reformed and innovated, and the teaching methods need to be improved.

## **3. How to innovate the course education and teaching of Computer Applications**

### **3.1 The change of teaching ideas**

For different times and different students, the teaching ideas of teachers should also be changed accordingly. For the current teaching ideas of university computer application courses, teachers should change from two aspects. One is to change the requirements for learning time. The mastery of computer knowledge can not be determined by the length of learning time. What is more important is understanding and mastery. The use of computers has never been a fixed mode, and the contents to be solved or understood are different every time. Therefore, the most important thing for students is to learn the methods of computer application <sup>[2]</sup>. And teachers should reduce the requirements for students' learning time and reduce the constraints on students. Students' practice of computer application courses is not limited by space and time, which can stimulate students' independent motivation for computer learning. The other is to change the requirements for learning mode. For the current teaching of computer application courses, the way of students' learning has broken the way that teachers guide students to adopt. Each student can independently find a suitable learning method, and is not limited to learning under the educational mode. Teachers should not limit students' thoughts, but should enable students to independently arrange their own learning and set their own learning goals.

### **3.2 Adoption of the blending teaching model**

Blending teaching model refers to a teaching mode that combines online teaching with offline teaching. The blending teaching mode is obviously suitable for computer majors. Computer majors are close to informatization and networking, and online courses are completed through network information equipment. So the blending teaching mode is widely used in computer teaching that is

not simply instilling the knowledge. Students need to practice and think more before they can truly master computer knowledge. The blending teaching can maximize help students to learn and master more knowledge. Computer learning is a process for step-by-step experience accumulation. The teaching is an external condition that providing students with opportunities to learn more knowledge. But what's the most important thing for students is learning actively. Another distinctive feature of blending teaching is that the teaching activities are divided into different sections. The learning for different sections needs to be formulated different teaching goals, and then other teaching methods can be used to teach. The learning of computer-related knowledge is the learning among different sections, so the application of blending teaching mode can effectively improve the efficiency of computer teaching<sup>[3]</sup>.

### **3.3 Improvement of Students' Interest in Learning**

In order to promote the course teaching of Computer Applications in contemporary universities to be more efficient, effective measures need to be taken to enhance students' interest in and enthusiasm for learning. In the process of planning experimental topics, it is necessary to promote the corresponding curriculum arrangement and curriculum content to better connect with students' employment to promote students' enthusiasm for learning. Specific work cases of enterprises or specific applications of computers in daily life can be selected as teaching cases, which can stimulate students' interest in learning. In addition, the contemporary universities can further expand the scope of course teaching of Computer Applications by integrating disciplines and the curriculum, so as to enrich the teaching content<sup>[5-6]</sup>. It is also possible to promote students' comprehensive interest in Computer Applications through regular creative and innovative competitions in design in the school. During the teaching, students' exploration ability, practical ability and solidarity and cooperation ability can be comprehensively cultivated, and then students' comprehensive quality can be well improved.

### **3.4 Improvement of the Professional Ability of Teachers**

In order to further improved the comprehensive quality and efficiency of the corresponding teaching, teachers' professional abilities need to be comprehensively improved in the process of innovative teaching. Teachers can instruct and cultivate students' practical ability. In the process of daily teaching, it is more necessary to improve teachers' professional and technical abilities. Regular targeted training can be conducted for on-the-job teachers to guide them to have the idea of more knowledge about new information technology and its application in the teaching process, and to help teachers to define new teaching methods<sup>[7-8]</sup>. At the same time, it is necessary to improve teachers' theoretical and technical level through teaching and research activities. And we should also fully define the potential problems in the teaching process of Computer Applications and make clear how to improve and innovate in the follow-up teaching process.

## **4. Conclusion**

The course teaching of Computer Applications is important for students' entire learning and their future life. In the era of big data and information, mastery of computers is only a stepping stone to the era of contact. In order to really make good use of big data and information, schools need to attach more importance to the course teaching of Computer Applications, and students should also have the awareness of learning computer courses. Schools should add the class schedule for computer application courses, and teachers should also change their teaching concepts and improve their professional skills, so as to better serve students and cultivate students' excellent computer

skills.

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