

# The Application of Cooperative Teaching Mode in Computer Teaching in Universities

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**Abstract:** With the continuous deepening of education and teaching reform and the rapid development of information technology, more and more educators have paid attention to the effectiveness of computer teaching in universities, and university teachers have included it in the key topics of educational and teaching activity design. The cooperative teaching model stands out among numerous teaching models with its unique advantages, and has been applied by many teachers in the classroom teaching process, playing an important role in promoting the improvement of teaching efficiency. Teachers of computer science in universities should continue to explore effective teaching methods, accelerate the process of organic integration of cooperative teaching models and classroom teaching content, in order to deepen the understanding and cognition of computer knowledge among more students and promote their comprehensive development. This article will study the application strategies of cooperative teaching mode in computer teaching in universities.

**Keywords:** Cooperative Teaching Mode; College Computer; Teaching Application Strategies

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## 1. Introduction

With the rapid progress of science and technology, the subject of computer science in universities has received the attention of many teachers. In the process of classroom education and teaching, teachers have also found many urgent problems to be solved, and have conducted a series of in-depth studies based on these problems, exploring solutions from multiple perspectives. The performance of college students in classroom teaching is closely related to the effectiveness of subject teaching. Teachers should view the problems they encounter from the perspective of students and deeply explore the content in textbooks during teaching, in order to broaden students' knowledge horizons and achieve the teaching goal of improving students' computer skills and core literacy. Under the guidance of teachers, students should develop a comprehensive and profound understanding of computer learning, and improve their operational abilities while mastering basic knowledge and skills in computer application.

## 2. Current situation of computer teaching in universities

### 2.1 Single and outdated teaching modes and methods

The teaching mode and methods adopted by university computer science teachers in the classroom teaching process are relatively single, and they are still influenced by traditional teaching design and concepts. Teachers themselves still remain in a rigid and rigid teaching system. When teaching, teachers only use their own demonstration and theoretical knowledge explanation to allow students to watch and listen to the class. The time occupied by teachers for knowledge explanation is too long, without leaving more time for students to operate on the computer. In the classroom, there is less interaction between teachers and students, and students only passively listen to what the teacher is saying. As a result, students' learning enthusiasm and autonomy cannot be fully utilized, and their interest in learning will gradually decrease. The teacher did not delve into the concept of cooperative teaching mode, did not introduce new teaching methods in the teaching process, and the application of cooperative teaching mode was only superficial. The true significance of this mode was not fully realized. The standards and methods for evaluating students' teaching are also biased, only

allowing them to complete theoretical exams without truly exercising their computer skills. Over time, students will become bookworms with theoretical knowledge but no practical experience, which is not conducive to their comprehensive development.

## **2.2 Unreasonable planning of teaching content**

The teaching content planned by computer science teachers in universities for students is not reasonable enough, and they do not have a deep understanding of the current learning situation and personalized learning needs of students. This leads to a disconnect between teaching content and students' learning level, and subject teaching cannot truly realize its significance. Teachers did not fully consider students' different computer learning foundations when planning their teaching, which resulted in some students being unable to adapt to the teacher's teaching schedule and even viewing computer learning as a learning burden. When teachers design teaching content and links for students, they do not take practical aspects into account, and students' practical abilities cannot be fully exercised during the learning process. This leads to the problem of ineffective improvement in computer teaching efficiency. The teaching activities carried out by teachers lack clear goal guidance and conceptual guidance, and cannot effectively break the shackles of teaching problems on educational work, which can greatly hinder the effectiveness of teaching. The computer operation content assigned by teachers to students is too simple to effectively exercise their operational abilities, or the assignment is too deep and completely beyond the students' ability range, which is a significant blow to students' learning enthusiasm.

## **3. The application significance of cooperative teaching mode in computer teaching in universities**

### **3.1 Beneficial to promoting students' comprehensive development**

After a long period of computer learning, college students have acquired a certain knowledge foundation and operational skills. Their theoretical foundation is already relatively solid, but there is still a lack of operational skills. Teachers need to pay more attention and adopt scientific and reasonable methods in the teaching process to promote the improvement of students' computer operation ability and the accumulation of experience. The traditional teaching mode has many drawbacks, such as teachers giving lectures and demonstrations, students passively listening, and their learning nature being completely suppressed. The application of cooperative teaching mode in computer classroom teaching has played an important role in promoting the improvement of students' learning abilities. During the process of computer learning, students can communicate and explore their ideas with other students, which is conducive to promoting their comprehensive development. During the process of collaborating with others to solve computer operation problems, students can also promptly identify their own shortcomings and knowledge loopholes and make up for them, which is greatly helpful for improving students' computer learning efficiency.

### **3.2 Beneficial to improving the teaching quality of teachers**

The adoption of cooperative teaching mode by university computer teachers in the teaching process can improve classroom teaching efficiency and optimize teaching effectiveness, greatly reducing their own teaching pressure and burden. Teachers can break away from traditional rigid teaching models and increase their teaching methods and experience through various channels, effectively improving their own educational and teaching abilities. Teachers can engage in teaching reflection to plan teaching content reasonably and design teaching from the perspective of students, which greatly helps to increase their teaching literacy and subject knowledge. Teachers can apply more modern teaching methods to the classroom teaching process, which is conducive to achieving the teaching goals of deepening the development of computer teaching and modernizing education. The cooperative teaching model can fill the loopholes in traditional teaching models, and teachers effectively integrate it with course teaching, injecting a new vitality into the efficiency of classroom teaching and revitalizing computer teaching.

## **4. The application strategy of cooperative teaching models in computer teaching in universities**

### **4.1 Establishing a learning group to jointly explore and research**

After a period of learning, college students have acquired a certain level of computer theoretical knowledge and operational skills, but their current operational level and practical ability are difficult to support them in completing some more in-depth and difficult

problems alone. Therefore, university computer teachers can divide students into groups based on their operational level, learning foundation, and learning ability during the teaching process, allowing them to jointly conduct research on difficult problems in a cooperative teaching mode. Students can fully communicate with other members in the process of group cooperation, which can fully demonstrate their own abilities, and effectively improve their autonomy and collaboration awareness.

## **4.2 Creating teaching scenarios and guiding deep thinking**

From a certain perspective, teaching context is a reflection of teaching quality, and the ability to create suitable teaching contexts for students based on teaching content is also a major test of the teaching ability of computer science teachers in universities. Teachers need to constantly explore how to create teaching contexts for students, and accumulate teaching methods and experience during the teaching process to enhance their teaching abilities. On the basis of fully considering students' cognitive abilities and operations, teachers can use specific operating procedures as examples to allow students to operate on the computer. Students can collaborate with other group members to learn in the teaching context created by the teacher. Teachers should adopt a scientific and reasonable teaching method to introduce the content of this lesson, and to stimulate students' sense of classroom participation, they can ask students before class whether they understand the relevant knowledge of computer application foundation, and include it in the scope of undergraduate teaching design.

## **5.Reflection on computer teaching in universities**

University teachers still need to continuously explore new teaching models to achieve the improvement of computer teaching efficiency. To enable more students to actively understand the theoretical knowledge and operational processes related to computers, teachers should update their teaching concepts in a timely manner to keep up with the development trend of education and teaching reform. We should not develop a relaxed and lazy teaching mentality just because of the small achievements we have already made in the teaching process. We should strictly demand that students go further and further on the path of learning computer science. Teachers should continue to deeply explore the advantages contained in the cooperative teaching model and accelerate its integration with teaching content, in order to truly achieve the goal of making students become talents with comprehensive development in the new era that combines knowledge and skills.

## **6. Conclusion**

Computer teachers in universities continuously explore the application of cooperative teaching mode in teaching and view the problems encountered by students in the learning process from various perspectives. They adopt scientific and reasonable teaching methods and modern teaching methods, timely update their own educational concepts and teaching models, and play an important promoting role in improving students' learning efficiency and activating the classroom atmosphere. Under the influence of the new teaching philosophy, we have created a learning environment with a strong academic atmosphere for students, guided them to deepen their understanding of computer learning, conducted self reflection, seized the development opportunities brought by educational reform for teaching, and achieved effective improvement in teaching efficiency.

## **References**

[1] Li H. The Application Practice of SPOC Mixed Teaching Mode in Basic Computer Teaching in Universities [J]. Computer and Telecommunications 2020;(8): 15-18.

[2] Zhang Z. The Application of OMO Teaching Mode in computer music Teaching in Colleges and Universities [J]. A Grand View of Art 2020;(23):83-85.