

# Reform of Computer Basic Classroom Teaching in Universities

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**Abstract:** With the development of information technology, the application software of classroom teaching emerges in an endless stream. How to effectively use these software tools to achieve the effectiveness of the classroom, this paper puts forward the research of classroom reform based on University computer basic teaching. Using this research can effectively improve the enthusiasm of students' mobilize the good atmosphere of the classroom, so as to achieve the effectiveness of knowledge transfer.

**Keywords:** University; Computer foundation; Classroom; Reform

## 1. Introduction

With the progress of the times, computer technology has been widely used in people's daily life, work and learning. Therefore, in the development of various industries, there is an increasing shortage of compound technical and computer technology talents. In the teaching of colleges and universities, the basic course of computer is a compulsory course in general education for non-computer majors. By learning basic computer courses, students can master basic computer knowledge and practical operation skills, use computer to query, obtain and organize information, and use computer technology to analyze related problems. But in the actual teaching, there are still some problems, so it is of great significance to study the classroom teaching evaluation of computer basic course [1-2]. The traditional teaching method is PPT + Classroom teaching. This teaching mode has the following problems: First, the class hours of basic computer courses in universities are reduced to 32 hours, but the writing of new contents increases the teaching contents and makes it more difficult for teachers to complete teaching tasks. Second, the computer level of students is different and specialized. The different characteristics of the profession lead to different learning needs, while the traditional teaching mode can only be one-size-fits-all and can't teach students in accordance with their aptitude. Third, many teachers teach at the same time, the teaching effect is different, there is no centralized advantage of teaching resources, students do not have the right to choose teaching classes freely. Flipping the classroom can better solve the above problems. Micro-class is easy for students to watch repeatedly, and can be fast-forward, playback, solving the previous classroom demonstration operation can't playback trouble [3-5].

## 2. The Defects of Traditional Basic Computer Teaching in Universities

In freshmen, computer public basic courses are usually offered. Just entering the university, students have a high learning enthusiasm, but because of the special subject of computer science, there are some differences in students' computer foundation: university students come from different places, affected by various factors, students receive different information education in the middle school stage, and the difference between used and unused computers. After a few lessons, students with poor or no foundation will not keep up with the pace of learning. In this case, students' interest in learning computer will be reduced, thus the quality of teaching can't be guaranteed. With the expansion of enrollment in Colleges and universities, the number of students is increasing, the number of students in public classes is more and less, which is not conducive to Teacher-Student interaction. Teachers and teachers can't pay more attention to students. Students lack enthusiasm in learning. Some students are distracted in class, playing mobile phones, chatting, listening carelessly, and even some students skip classes.

Computer experiments are usually taught in the computer room. For example, the theory and experiment of database ACCESS in the second semester of the first grade are taught in the computer room. The computer room is equipped with teaching playback software and large screen projector. But in the actual teaching, teachers can't effectively use the teaching equipment, even in the computer room, students will not concentrate, but play computer games freely. It is more difficult to complete the experiment work independently.

At present, many majors require students to have certain computer software application abilities, such as advertising design. Graphics and image processing software operation skills are the skills that students must master. Although some teachers have a good art foundation, they do not understand the professional characteristics, resulting in unsatisfactory teaching effect. In addition, for the stu-

dents majoring in project management, they need to master Spass operation software; for the students majoring in communication, they need to master Matlab software. In the teaching of basic computer courses, teachers can't effectively teach without relevant professional knowledge.

### **3. New Design of Classroom Teaching for Basic Computer Education in Universities**

#### **3.1. Making excellent microlessons**

Firstly, according to students' needs and syllabus requirements, micro-classes are established to control the length of micro-classes. It is advisable to control the length of time in about 5 minutes, not more than 10 minutes at the longest, a micro lesson and a problem. For theoretical problems, try to use popular and vivid language, using analogy and other methods to explain the problem clearly. Video that you can understand will make students interested in watching it alone. Secondly, when making micro-lesson video, breakpoints can be set ingeniously in the process of video playback. Students can answer the questions of breakpoints and watch the video after answering correctly. The pan-elegant platform records the length and frequency of each student watching micro-lessons, which can effectively reflect the difficulties in the learning process.

#### **3.2. Set interesting and clear learning tasks and goals**

Teachers skillfully design topics to be discussed in the next class, arrange pre-class learning tasks, interesting or life-related topics can attract students to prepare, and promote students to actively collect and learn topics related to the content. According to the learning goal, assign homework before class.

#### **3.3. Improve the diversified evaluation mechanism**

Show the statistics of students' self-study before class recorded on the background of Panya Platform, let students know the length of their pre-class study, the progress of completion, etc. These data will be used as one of the basis for calculating their usual scores. When the students realized that the teacher had a good grasp of their online learning, they felt nervous. In class, the use of elegant mobile learning through self-learning content for 5 to 10 minutes of the test, learning through automatic scoring, and on-the-spot announcement of results, to promote students to gradually develop the habit of self-learning before class.

### **4. Classroom Interaction of Basic Computer Education in Universities**

In practical teaching, curriculum assessment method is an important way to test teaching effect and students' learning situation. Teachers should appropriately adjust the

proportion of students' on-line examination and final examination papers, increase students' experimental tasks and innovative discussion scores. If students have innovative breakthroughs, they can get corresponding points to encourage students, so as to stimulate students' enthusiasm for learning and give full play to their creativity and imagination.

In the classroom, the following factors are directly related to the classroom effect.

Teachers' personal charm: teachers with good image, affinity, passion and good voice are naturally liked by students. Students will love this course because they like this teacher.

The life of language and cases, and the Enlightenment of problems, make students have imaginative space. The main line of cultivating innovative thinking and computational thinking is always running through teaching.

Classroom is lively, students can be free-wheeling, fantastic, but teachers should grasp the main line, so that the classroom is scattered and distracted.

Because there are differences in teaching contents and forms, in order to achieve the goal of stimulating confidence and common progress, we should pay attention to avoiding reflecting individual differences in evaluation, emphasizing the progress and promotion of students at different levels, so as to accumulate students' learning confidence, but also to ensure that backward students can achieve the lowest level of teaching. Learning objectives should not only emphasize "progress", but also neglect to master knowledge and skills.

### **5. Concluding Remarks**

The new design teaching classroom of university computer foundation can effectively alleviate the current problems faced by the course. It needs the assistance of advanced teaching platform to enable students to learn more efficiently, but at the same time, the requirements for teachers are greatly improved. Nowadays, classroom teaching is no longer the traditional teaching of knowledge, but the cultivation of thinking ability based on application. The main goal is to cultivate students' Computational Thinking and innovative thinking, stimulate students' creativity, subjective initiative, and the ability to communicate and cooperate with others, so as to adapt to social development.

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