

# Research on Developing Project Teaching Method in Computer Course Teaching

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**Abstract:** This article focuses on the research and analysis of project-based teaching methods in the teaching of computer courses. Based on the existing problems in traditional education of computer courses and the application methods of project-based teaching methods in computer course teaching, it conducts in-depth discussions and analysis from the following aspects: student-oriented teaching, building a complete teaching system, and building a complete evaluation mechanism. Its purpose is to strengthen the value of project-based teaching methods in computer course teaching. This article focuses on the research and analysis of project-based teaching methods in computer course teaching, combining the existing problems in traditional education of current computer courses and the application methods of project-based teaching methods in computer course teaching as the main basis, from student-oriented teaching to building a complete teaching system. The purpose of in-depth discussion and analysis on the construction of a complete evaluation mechanism is to strengthen the value of project based teaching methods in computer course teaching.

**Keywords:** Developing Project; Teaching Method ; Computer Course Teaching

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## 1. INTRODUCTION

The 21st century is the era of information technology, in order to cultivate adaptation! "The talent required for the development of information technology in the 21st century, China has formulated a series of relevant policies in computer education, and computer education has also developed vigorously from scratch and from small to large. However, after years of working in computer teaching in vocational schools, I deeply feel the phenomenon of low efficiency in computer classroom teaching, and cultivate students who only use software mechanically without creativity. The first reason is that: Due to the limitations of the current enrollment system, the quality of vocational school students is generally not very high, and students' self-learning ability and self-control ability remain at a relatively low level.

Students learn mainly by accepting theoretical knowledge, which prevents them from improving their comprehensive abilities and qualities, which is not conducive to their development. In the new era, it is necessary to combine the rational use of teaching tools, timely change traditional teaching forms, stimulate students' interest in learning, and make students become talents needed by the future society. In this context, project based teaching methods are used in computer teaching to stimulate students' interest in learning, cultivate their basic skills, and make them useful talents in the future society. The first principle that project based teaching methods should adhere to is targeted teaching. Only by ensuring that project selection is targeted and can meet the needs of different groups of students can project based teaching methods play a guiding role and promote the development of autonomous abilities of the groups of students.

In this regard, educators should pay attention to the target audience and the degree of mastery required of the curriculum project when implementing project based teaching methods in computer course teaching. In teaching design, students must be placed in a dominant position, with teachers primarily playing an auxiliary role. In the classroom teaching process, teachers should provide a display platform for students to actively learn and strengthen the cultivation of students' innovative spirit. At the same time, teachers are the designers

and organizers of the entire project teaching, so it is also necessary to pay attention to the guidance role of teachers and participate appropriately in student discussions to achieve good teaching results.

The so-called project-based teaching method is one of the unique teaching methods that things has formed through long-term teaching practice. Its initial definition is: a project team composed of schools and enterprises that goes deep into practice, learns and applies existing knowledge while solving problems, and cultivates problem-solving skills in the forefront of practice. In this context, it refers to adopting the method of group discussion and collaborative learning, using the theme of "project engineering" to drive students' learning with practical tasks. By completing activities, applying existing knowledge and mastering new knowledge, the goal of cultivating problem-solving ability is achieved. Stimulate students' desire to learn, so that students can fully participate in teaching. Teachers should understand how to design project content based on students' interests, characteristics, and learning situations, and fully solve various problems and shortcomings in teaching through reasonable guidance from teachers, thereby fundamentally improving the timeliness of computer course teaching.

## THE PROPOSED METHODOLOGY

### 1.1 The Necessary Conditions for Implementing Project Teaching Method in Vocational Schools

In terms of actual teaching objectives and content, teachers should combine teaching content that is close to students' actual lives. Developing project based teaching methods in computer course teaching is another key to the success of project based teaching methods, based on its purposefulness and interest. Even if it is rich and colorful, with clear objectives, and without practical operability, it cannot ensure that students meet project requirements based on project objectives. Therefore, in the application process of project design, it is also necessary to pay attention to teaching students in accordance with their aptitude. After completing the establishment of project tasks, teachers should group

according to the specific situation of the class they are teaching. When grouping, teachers should fully consider the characteristics and learning abilities of students, and have each group select a group leader, who is mainly responsible for supervising whether the work tasks of the members of the group are strictly implemented as required, and organizing various activities of the group, so as to ensure the smooth implementation of the project tasks of each group, Promote the learning initiative of team members.

In the project based teaching method, the entire process and all content of teaching should be implemented through projects. After the project is determined, the entire teaching process is also determined, so the selection of projects is the key. The selection of projects should be based on the teaching content, with realistic objects as the materials, and should not only include basic teaching knowledge points, but also mobilize the enthusiasm of students to solve problems. The selection of projects is an important part of pre class preparation. Teachers must go deep into students and propose one or more design methods that can allow students to fully utilize their intelligence and discuss with them.

In teaching, teachers should pay attention to cultivating students' autonomous learning ability, and also timely change teaching ideas and concepts based on the needs of the times. They should provide reasonable guidance to students, guide them to operate correctly, and assist students in completing unfamiliar parts of the content through hands-on work. After the project teaching method, which focuses on students' autonomous learning and supplemented by scientific guidance from teachers, how to ensure the scientific guidance of teachers, it is equally important in the teaching of computer courses.

Therefore, educators are strictly prohibited from revealing the answers directly and telling students how to do it when they encounter difficulties in self-learning, which violates the original intention of autonomous learning and also loses the value of the application of project-based teaching methods. The focus of the project teaching method is on the process rather than the results. The process assessment is mainly arranged when students complete each module project as planned. After each module is completed, a phased assessment will be conducted, and teachers can assess the module projects completed by students based on the key points of the experimental project.

## 1.2 Application of Project Teaching Method in Computer Course Teaching

Teachers should explain common problems found during the assessment process to the entire class and record them in their own teaching experiences to accumulate teaching experience. Creating learning resources and environments is a primary task for teachers. Teachers need to provide students with multiple opportunities to apply the knowledge they have learned in different contexts, making full use of modern educational technology to provide students with multiple learning resources. Before students complete projects independently, teachers need to provide appropriate guidance. Guidance mainly includes explaining new knowledge and explaining the specific implementation of the project.

The purpose of implementing the project based teaching method is to complete the teaching content through students' autonomous learning and research learning, thereby completing the computer teaching content in actual teaching, transforming the original passive learning form into active

learning form, and improving their own abilities. During the entire process, teachers should be good at thinking and analyzing the overall situation of students, conducting quantitative evaluation and assessment of the learning process of students, and actively encouraging students to self-evaluate, Be good at evaluating the learning process and results of others, as well as evaluating each other in groups.

Through diversified evaluation forms, students can master their own learning problems and better solve them. After completing the project, it is also necessary to do a good job in developmental evaluation. Developmental evaluation should mainly include two parts: one part is a summary of ideas, which evaluates students' completion of the project tasks, with the aim of cultivating students' best thinking methods for solving problems and identifying their shortcomings in theoretical application; The other part is a summary of the techniques. It mainly cultivates students' problem-solving abilities and fully absorbs the essence of the entire project activity. The steps to implement the project,

Teachers should explain clearly and provide relevant information in a timely manner. In addition to telling students what the upcoming project is, teachers should also appropriately remind students of what to do first and then. In this way, it can not only avoid students with poor acceptance from being helpless when facing projects, but also avoid students from taking unnecessary detours. The project completion process is a process of exploration and research by students themselves. In order to learn from others, it is also important to summarize the project after completion. It should include a summary of ideas and skills. Summary of ideas can help students clarify the best thinking methods for completing projects and find their theoretical shortcomings.

In the skill summary, the phrase "multiple solutions for one problem" should be highly recommended. Each method, regardless of its difficulty, should be presented to students, and the teacher and students should jointly evaluate the advantages, disadvantages, and scope of application of each method. Pay full attention to the teaching process and results. The computer learning process is not a static one, but a flexible process that requires teacher support and assistance to achieve the best results. During the implementation of the project-based teaching method, teachers should be aware of their own role, do a good job of guidance, conduct comprehensive observation of the learning process of students, and then make correct evaluation and analysis after the end, fundamentally improving the teaching quality of computer courses, laying a good foundation for students' future social development.

## 2. CONCLUSION

This article focuses on the research and analysis of project-based teaching methods in the teaching of computer courses. Based on the existing problems in traditional education of computer courses and the application methods of project-based teaching methods in computer course teaching. The novel ideas are presented and in the future, the applications will be studied.

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