Research and Application of Task-Driven Teaching Method in Higher Vocational Computer Teaching

Hongwei Hao

Jiuquan Vocational Technical College, Gansu, 735000, China

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Abstract: The continuous development of science and technology has brought us many conveniences, and the computer industry has become an indispensable tool for people's lives, and the cultivation of computer talents has become a popular training direction. For higher vocational schools, computer is not only a major, but also a basic skill to master in the society. This has provided great help for enhancing the competitiveness of employment and the comprehensive quality of talents. The task-driven teaching method can deal with the current problems of computer teaching in higher vocational education and improve the teaching effect.

1. Introduction

At this stage, because the Internet-led information technology revolution is still in progress, people are affected by this, and their concepts are constantly updated and improved. In this regard, the traditional computer curriculum teaching no matter the concept or the way of development no longer meets the society's demand for talent training. Therefore, higher vocational colleges should abandon the old teaching system as soon as possible, advance with the times, and use the task-driven teaching method to improve the teaching effect in continuous learning and summarization, so that the students' computer skills can be improved. Under the idea of highlighting students' subjective initiative, students can further enhance the computer application ability through the effective guidance of teachers.

2. Summary of Task-Driven Teaching Methods

2.1 Connotation

Task-driven pedagogy is a major innovation in the teaching system. It has a more obvious role for practical teaching based on operational skills and practical knowledge, especially for computer vocational and basic courses in vocational education. Specifically, in a special situation set by the teacher, students complete the predetermined learning tasks set before the class. The task requires students not to be limited to the theoretical knowledge of books, but to carry out more practical operations, and turn back to reflect on the combination of theory to achieve the purpose of inspecting students' collaborative creativity, so as to solve practical problems in life and achieve teaching goals. The core of the task-driven pedagogy is to create a specific teaching environment. Under the guidance of teachers and task-driven, students conduct self-inquiry and cooperative inquiry, and eventually form a highly recognized solution. The teacher will make the final comment [1]. As a result, the task-driven teaching method has a particularly unique behavior mode, which is more in line with the training requirements of students than traditional teaching.

2.2 Feasibility of Implementation

Whether it is a computer major or a computer basic course, students must master a certain theoretical knowledge, and examine the students' practical hands-on ability through a variety of forms, which requires higher students' comprehensive ability. However, in the actual teaching process, some influencing factors have appeared in the teaching of professional courses. Taking the computer major as an example, there is still a big gap between the current professional courses, and

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the knowledge fields involved in the sum of the various professional courses are still relatively wide, which makes it difficult for teachers to intersect teaching content between any two courses. Not conducive to the improvement of the academic level and teaching mode of the computer major [2]. By adopting the task-driven teaching method, the teaching tasks will be divided into less content and less difficult learning tasks, which will increase the integration of subject knowledge, promote the operation of new knowledge construction, and the normal development of teaching plans and The realization of teaching goals, so the task-driven teaching method has a more scientific feasibility for the implementation of computer science in vocational colleges.

2.3 Features

2.3.1 Students and Teachers Work Together as the Subject of the Classroom

In the traditional teaching model, the teacher is the main body of the classroom, and the students are only one-way recipients of knowledge. They passively acquire knowledge in the duck-feeding education, which makes the students' enthusiasm for learning unable to be effectively improved and delays the learning results. One of the characteristics of the task-driven teaching method is to adopt the teaching method in reverse order, that is, to give the result first and then go back to the derivation process. Teachers arrange the key knowledge involved in this lesson to students in the form of small module learning tasks before class. Let students exert their independent exploration ability to achieve the role of learning knowledge in practice and discussion to complete the task of this lesson [3]. According to their own ability, students can independently summarize the knowledge content, so that the theoretical questions at the macro level become more systematic knowledge. Moreover, when completing the tasks assigned by the teacher, students can gain knowledge and experience through continuous efforts. The most important thing is the spontaneous sense of accomplishment, which has a greater role in mobilizing the enthusiasm and enthusiasm for participating in the discussion. The relationship between teachers and students has changed from the original one-way knowledge transfer to the guide of the classroom, the assistant of the students' inquiry, the designer of the teaching content, the maintainer of the classroom discipline, and the participant of the post-subject evaluation. Student communication is more convenient.

2.3.2 Help Students Learn Systematically and Efficiently

The task-driven teaching method is a combination of teaching content and teaching tasks. After completing the learning tasks, students can basically understand the teaching content involved in the classroom more deeply. In the process of completing tasks and exploring knowledge in class, the process of solving problems is always running, and students' abilities will be improved and exercised in this series of processes [4]. The primary goal of task-driven pedagogy is to enable students to improve their ability to discover, analyze, and solve problems, and to cultivate their exploration and innovation abilities. In the classroom, the teacher should play a guiding role, observe the students' learning methods, the completion of tasks, decide whether to give more thinking time or opportunities according to the students' dynamics, and carry out the following research in a self-directed manner. When organizing and designing teaching activities, teachers should consider issues from students' thinking, not only to establish a more novel cognitive structure for students, but also to promote the comprehensive teaching level of the teacher team.

3. The Design Process of Task-Driven Teaching Method in Computer Teaching in Higher Vocational Education

3.1 Clear Teaching Objectives

Before using the task-driven pedagogy to carry out teaching activities, teachers must first complete the framework of the work, such as clarifying the teaching tasks, check whether the content of the course application task-driven pedagogy is more in line with actual needs, and whether it can achieve the focus of promoting students' knowledge in the classroom Whether the effective absorption and mastering of difficult content can better promote the construction and

improvement of the entire computer professional knowledge system. After clarifying the teaching goals, teachers have the direction of curriculum design, and can arrange the teaching plan more reasonably, so that the teaching efficiency can be improved.

3.2 Arrange Tasks

After the teaching objectives have been clarified, teachers can use the task-driven teaching method to further release and decompose the teaching tasks. For the key and difficult content involved in the classroom knowledge, teachers should pay attention to integrate it into daily teaching, reduce the obstacles for students to complete various tasks, strengthen students' absorption of the theories of knowledge listed in the classroom, and improve the mastery of knowledge points [5].

3.3 Analysis of Teaching Tasks

After arranging the teaching tasks, the teacher should first analyze the basic situation of the students through the computer, discover the problems found by the students in the learning process, and help them to solve the rough methods and paths of the problems, so that the students in the process of completely independent inquiry Finding ways to solve problems can further promote the efficiency of classroom learning at all times within the overall controllable range, and can guide students to establish logic and innovative means to solve problems in a targeted manner.

3.4 Complete Classroom Teaching

In the task-driven teaching method, often the end of the teaching activity is task completion. After the teacher guides and organizes the students to complete the task, and after discussion and analysis, the teacher can solve this problem through the knowledge he has mastered or think of other methods [6]. In this process, students are the main body of action, and teachers play a more auxiliary and guiding role. In this process, students have fully exerted their subjective initiative and achieved the basic teaching goals of task-driven teaching methods, so that students can significantly improve their abilities in all aspects.

3.5 Reflection on Teaching Evaluation

After all the teaching tasks are over, evaluation and reflection are the end points for the current teachers' inspection of students' thinking style, task completion and other indicators. Generally speaking, teaching evaluation is divided into three parts, namely "self-evaluation", "medium evaluation, and poor evaluation". Self-assessment and mutual assessment are widely carried out among students, mainly to find school attitude problems within the ability limit, etc., and correct the deficiencies that exist in themselves. Teachers should be realistic in their evaluation work, so that students can further improve classroom mastery, and increase their encouragement to students to increase their interest and enthusiasm in learning the course.

4. The Application Strategy of Task-Driven Teaching Method in Higher Vocational Computer Teaching

4.1 Construct a More Efficient Classroom Environment

While preparing lessons, teachers often first consider the teaching objectives, which determine the overall tone of a course. How to use the task-driven teaching method to enable students to successfully complete the tasks in the classroom is the focus of this class. Therefore, teachers should clarify the teaching tasks, and improve and optimize the specific teaching methods by understanding the students' understanding and other actual conditions, so that the computer classroom becomes more efficient and smooth. For example, in the learning of the basic knowledge of computers, teachers can make full use of the equipment around students, set topics to think about how the specific structure of the computer is constructed, and explore the functions of various hardware and software structures, so that the knowledge points in the classroom can be remembered as soon as possible.

4.2 Let Students Take the Initiative in the Classroom

Under the framework of the new curriculum system reform, students are the main body of the current classroom. When teachers use the task-driven teaching method to carry out teaching, they must respect the student's subject identity, so that the students' autonomy in the classroom learning process can be fully exerted. After each class teacher has assigned specific learning tasks, they can set the situation according to the actual teaching content, organize students to carry out self-inquiry and group inquiry, discuss the solution to this problem, and carry out autonomous operations according to known conditions, and Brainstorming for step-by-step innovation can eventually form a distinctive task completion mechanism, so that students can have a sense of gain in the classroom and improve classroom effectiveness [7].

4.3 Increase the Inspiration for Students' Thinking

First of all, teachers should be the masters of the classroom as a whole, monitor the progress of the classroom and the overall direction of the tasks, and the content of the students' discussions that deviate from the classroom should be corrected in time to keep them close to the classroom tasks. Students have a bottleneck to solve the difficult task, they can properly guide students, and finally find a solution. Secondly, teachers should do a good job of adjusting the classroom atmosphere to ensure that the classroom is always in an active and healthy atmosphere, and all the independent discussions of students can be carried out efficiently. All students should be encouraged to participate in the activities of independent inquiry, so that everyone can think and gain something, and ultimately promote the improvement of students' thinking ability.

4.4 Expand the Frequency of Hands-on Training and Train Practical Ability

When using the task-driven teaching method to start teaching, teachers can combine the core teaching objectives of computer courses and actual teaching needs, and set up as many hands-on training courses as possible. Nowadays, most computer courses are conducted in the computer room, and the basic tool of computer is basically understood by teachers and students. However, this does not mean that the frequency of training sessions can be reduced. Teachers still need to refer to the lesson plans for the design of computer tasks, so that the theory can always be connected with reality, and enhance the students' hands-on ability and practical ability. For example, when conducting Excel teaching, teachers can first let students understand the basic structure and use of this software by way of explanation, and then set up tasks for students to independently explore and complete, such as financial statement data calculation and other functions. Solving life problems in the future also provides great help.

4.5 Improve Teaching Evaluation System

The teaching evaluation system is an indispensable important link after the completion of teaching activities. Various indicators such as the completion progress of the students' content in the classroom, the changes in the thinking of the entire class, and the setting of the teacher's teaching goals have their intuitive evaluation system to test the effectiveness of the classroom. Students' self-inquiry performance in the classroom can be completed through self-assessment. Teachers only need to make basic pre-judgments based on the discussion results of various groups, and encourage students in the process to enhance students' self-confidence. Delegating the main body of evaluation to students can also promote the improvement and promotion of teachers' teaching goals and teaching methods, thereby improving teaching effectiveness.

5. Task-Driven Teaching Method Should Also Pay Attention to the Problems in Computer Teaching in Higher Vocational Education

First of all, students are not homogenous. Each individual has its own unique differences. Teachers need to adopt teaching strategies flexibly to solve students' learning difficulties in a targeted manner. Second, the setting of teaching tasks must be of a certain scientific nature, combined with the students' current course completion status, predicting whether the students can

accept the difficulty of this lesson task, and carrying out dynamic adjustments to make the setting of the teaching situation more in line with the students' basic situation. In addition, the cultivation of students' autonomy is always a top priority. Whether it is theoretical learning or practical operation, students need to use the knowledge they have learned, and it can be completed by inferences. Teachers should pay special attention to this aspect while guiding students to complete tasks.

6. Conclusion

Computer courses are very important in the teaching system of higher vocational colleges, and the requirements for students' various abilities are relatively strict. Task-driven pedagogy promotes students' self-determination in the classroom, guides them to conduct task analysis autonomously, and finds ways to accomplish tasks in group inquiry. In this process, the students' self-learning ability and inquiry ability have been fully exercised, which can improve the level of computer operation and provide help for the future to enter the society and enhance competitiveness.

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