# The experiment of computer courses teaching mode design in Higher Vocational Colleges

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**Abstract.** As to the current computer education in higher vocational and technical colleges, it has been a deserved research to study how to conduct specialty construction. Through the continuous exploration and practice, found that completing the task by the soft, hardware environment to create real, can give full play to the initiative of students, and improve students' thinking, comprehensive analysis, problem-solving ability and innovative ability in the task driven teaching method.

**Keywords:** task; subjective initiative; innovation.

## 1. Introduction

There are some limitations in the current teaching mode, these limitations in teaching mode implementation condition, goal orientation, operation procedure, evaluation of the effect of these factors as part of testing students' thinking. For light weight theory of practice teaching mode, the students accept the knowledge passively learning style, standardized teaching design, there is no specific training methods and students from the development of teaching evaluation in the teaching mode reform are gradually towards constructivism teaching concept, pay attention to the cultivation of the ability of high order, pay attention to the unity of knowledge and value orientation, form various teaching forms of learning, diversity, mobility, asymptotic teaching design, innovative learning, promoting the development of the learner's evaluation of the teaching mode of substitution.

In computer practical teaching, we take the student as the center, taking task for teachers and students can improve the limitations existing in the teaching process to a certain extent driven teaching model, students can use the advanced information technology to find information, make the students with the real task to learn, diversify the way of teaching, encourage students to innovate, to help students find the inspiration, and through the teaching evaluation of interactive mode to enable students to use existing knowledge, skills in practice, acquire new knowledge and improve skills, so that students learn to truly grasp the content, and through the task to infer other things from one fact.

We design as an example to introduce the computer experiment course in the task driven teaching mode and the concrete realization of the process to "the course of computer installation and maintenance" of the card to buy. The whole teaching process is proposed, three basic stages of implementation and evaluation for the task.

## 2. Design and assign tasks

How to choose the computer is a set of theory, practice as one of the skills, it needs a certain theoretical basis for support. Teachers in the teaching are usually in accordance with the practice from the general to the whole, after the first theory model. This kind of teaching mode can make students absorb knowledge in the process of producing very passive, do not know why the idea of learning process, teaching the students the boring theory in teacher in lost interest in learning. To enable students to participate in teaching initiative, from passive to take the initiative to learn, we refer to the task teaching method. Elaborate design task is the key to the whole teaching design, it should be combined with the actual needs of students. In this important aspect of teachers and students, through the pre class contact, to know a lot of students have to buy the idea of assembling computer, but don't know how. The teacher through the "machine design students purchase" task case, make every student

with interest, doubt and purpose to study, and not be passive indoctrination. After the design tasks according to the task of teachers and students together to analyze their purchase idea. Through the interaction between the students and that students want to buy a function can meet the daily learning, surfing the Internet, listening to music, watching movies and other needs, priced at 3000 yuan of computer. The above requirement analysis is the first part of the contents of the board to buy should complete, natural finish in student participation in. Demand analysis are made, the teacher to this task as an example to explain card purchase, assembly knowledge. In the teaching process through the analysis on the theory of the task, and in turn through the task to verify the theoretical results. For the CPU, motherboard, memory, hard disk, graphics card and other optional combined with the task, imperceptibly finish the relevant theoretical knowledge, to improve the students' learning effect.
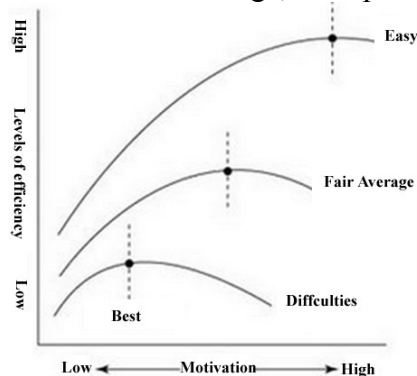


And explain the design of the task allows students to board the purchase of steps and methods have a whole train of thought, but the computer configuration is flexible, such as family learning, Internet cafes game type, business office, crazy game, graphics, audio and video type luxury have a fever type, in order to provide students with more practice and exploration, space, we follow the machine function classification and gave the students a configuration "game cafes, entertainment type" computer task, inspire each student through the task practice desire, improve students' analysis, solves the question ability.

## 3.  Analysis and complete the task

This task is completed by the following ways can be combined with:
1) A team consists of three people.
2) Market research or to hardware site related information and evaluation;
3) Simulation kanji function using website online, customized solutions.

In the process of middle school students can be based on existing knowledge and use the above method to actively explore, thinking, analysis and matching problem models. In the demand analysis, some students focus on the Internet gaming entertainment function, some students based on consumer needs to consider, the Internet bar divided into different functional areas, according to the different characteristics of different schemes are custom. Full of infinite vitality in this atmosphere of middle school students, their thinking ability to imagine infinite extension. Demand of customized later, the students will be faced with the choice of demand card accessories, such as in the purchase CPU to take into account the selected processor series, the core of quantity and price issues; for the selection board to consider issues such as CPU series brand, North and South Bridge chip, support; to consider choose how much memory capacity and access speed, chip type problem; graphics to select the graphics chip, what type of memory type and capacity and so on, through the above way for students to make a reasonable choice according to the matching requirement and launched a warm discussion. The students in the process of division and cooperation, independent study completed the task of learning, not only to consolidate the knowledge, but also stimulate their inspiration and innovation consciousness. At the same time it is also the unity and cooperation, make the students learning tends to be more independent.

To complete the task at the same time, give full play to the subjective initiative of students, to abstract knowledge into concrete; the boring theory knowledge into interesting. In the process of middle school students are willing to take the initiative to operate, to master. When the student has completed a task inside there will be a sense of achievement, a sense of joy. This power is not only improve the students' cognitive ability of practice, but also enhance the self-confidence of students.

## 4. Display and assessment tasks

When the students through the efforts to complete the teacher assigned task very hope to get an opportunity to self display. At this time, teachers from each group of students elect a representative to the front of the platform using large screen demonstration, explaining their scheme. Process explanations in each group students, other students will be with interest seriously listen to, and analysis, advantages and shortcomings of others thinking scheme, in the students to broaden the thinking at the same time, through the contrast can also find their own deficiencies, and learn from each other. Finally, by the teacher for each student to give the integration scheme evaluation, summary. To finish the task more successful team, teachers should be affirmed, praise, and give some reward when necessary. We should also give encouragement and to correct for other defective scheme, through effective incentive, can improve every student's self-confidence, let students learn something, the incentive system has a great impetus to the task teaching method. Students will also be your biggest advocate's task teaching. Because they are in the process of accomplishing the task in both enjoy the fun of learning and improve their skills.
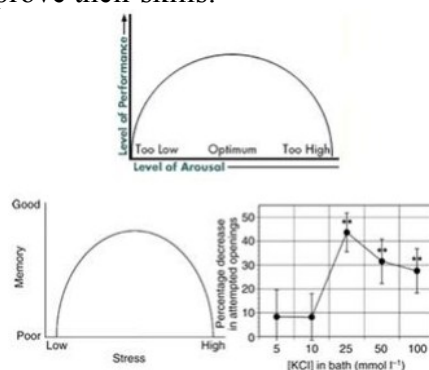


In conclusion, by combining the teaching practice to complete the typical teaching task, to achieve the teaching goal and establish the subject structure system of the task driving teaching mode can make students perception, understanding, consolidate, and use com. can fully mobilize students' cognitive interest and desire for knowledge, so that students in the learning process, to explore the natural to accept knowledge, so as to achieve the cultivation of students' practical ability and mining their creative spiritual goals, so that students can improve their own quality, has obtained the good teaching effect.

## References

[1]Wenxiong Zheng, A new probe into the core problems of task based Language Teaching, Teaching and management, p. 23–24, 2007.

[2]Yanjun Wu,Yu Peng, Should pay attention to in the task-based teaching method, Science and technology information (Academy version), p. 67–68, 2007.

[3]Zhong Wang, Experience of using task-based teaching method, Heilongjiang Education (High School Edition), p. 72-73, 2007

[4]Ruizheng Shao, Educational psychology, Shanghai people's Publishing House, Shanghai, p 205-209, 1997.

[5]Chuanwu Xiong,On learning strategy, Jiangxi Education Publishing House, Nanchang p. 96-98, 1997.