

Application of Action Oriented Teaching Method in Computer Teaching Education Reform in Colleges and Universities

Xiaoning Cui, Linlin Lei, Liping Lv, Huiyan Zhao

Shengda Trade Economics & Management College of Zhengzhou, Zhengzhou 450000, Henan, China.

Abstract: In the teaching of computer courses in colleges and universities, it is very important to cultivate students' operational ability, in order to train students to adapt to the social environment as soon as possible after graduation, and cultivate their innovative thinking and creative ability. Among them, the action oriented teaching method is the most effective one in the teaching reform of computer courses in colleges and universities. This paper mainly studies the problems existing in computer teaching, discusses the specific application of action oriented teaching method in computer courses, and provides certain reference value for computer education in Colleges and universities in China.

Keywords: Computer Teaching; Education Reform; Action Oriented Teaching Method

In the context of the rapid development of the Internet network, the form of the relevant computer major in colleges and universities is becoming more and more severe. Only by constantly exploring new teaching methods can it be conducive to the good development of computer science, and the action oriented teaching method mainly studied in this paper came into being under this background.

1. Action oriented teaching method

1.1 Concept and characteristics of action oriented method

Action oriented teaching method is a kind of teaching method originated from Germany, which is made up of a variety of teaching methods and technologies. Its main manifestation is that the teacher is driven by "action oriented". In the teaching process, the teacher plays the subjectivity of the educated, not only speaking on the platform, but also guiding the students from the side to ensure that they can carry out the correct learning process. This can not only cultivate students' ability to analyze and solve problems actively, but also guide students to advance towards the expected teaching objectives in the process of solving problems. The core of action oriented teaching method is to take students as the main part and teachers as the supplement. In the teaching process, we need to pay attention to the students' interest and guide them continuously so that they can participate in the whole process.

The action oriented method has the following characteristics: firstly, compared with the traditional teaching methods, the action oriented method emphasizes the students' autonomous learning rather than the teacher's indoctrination teaching; secondly, the action oriented method has the quantifiable characteristics; thirdly, the action oriented method pays more attention to the externalization of theoretical knowledge in practice.

1.2 Practical significance of action oriented method

The action oriented method is a successful demonstration in the current computer teaching reform. Its significance lies in

that the action oriented teaching method is different from the traditional teaching method. It changes from the original teacher based teaching method to the student-oriented teaching method. It also trains the students' ability of collecting materials and team cooperation, and plays a certain role in promoting students' construction of their own learning system and framework.

2. The existing problems in the computer teaching of colleges and universities in China

2.1 Outdated teaching mode

As far as the current situation of computer teaching in China is concerned, most colleges and universities can not follow the development trend of the times in teaching mode to carry out teaching reform. First of all, due to the rapid increase in the number of colleges and universities in China, and the continuous expansion of enrollment, resulting in the limited technical equipment can not meet the needs of the school and the computer education equipment requirements in China's colleges and universities are always unable to achieve the expected advanced level, so that the teaching quality can not be greatly improved. Secondly, some colleges and universities in our country have been established for many years, but their teaching philosophy can not be improved with the change of the times, with relatively backward teaching concept. Teachers usually teach by showing multimedia courseware, without practical operation teaching, so that students' operational ability can not be exercised. At the same time, the overall teaching efficiency of these colleges and universities can not be greatly improved.

2.2 Single teaching method

The teaching methods of most colleges and universities in our country are still relatively simple. Most of them follow the traditional teaching method of teachers' lectures and students' listening. It is difficult for students to improve their enthusiasm. Too little hands-on operation leads to lack of experience, which also leads to many students just talking on paper, superficially understanding some of the teachers' knowledge, but not properly applied to real life. In addition, many college students' autonomous learning ability needs to be improved, and in this regard, teachers often give them some homework, and let them review and summarize by themselves, which will only make them more passive and reduce their interest and enthusiasm in autonomous learning related knowledge, unfavorable for their learning. Therefore, in terms of teaching methods, teachers should change according to the situation, make more innovation in the classroom, and try to make them move, in order to better stimulate students' interest, and learn computer related knowledge independently.

2.3 Low efficiency of classroom teaching

Under the influence of traditional teaching concept, most colleges and universities still give priority to teachers' teaching rather than educated people in class, which makes students' status more passive, and their learning enthusiasm is easy to be hit and lose their interest in learning, leading low efficiency of classroom. In addition, teachers in colleges and universities generally do not attach great importance to the teaching of computer classes, and the school's computer equipment is not in place, which leads to that even though the computer class is taught in the computer room, it is difficult to ensure that every student can fully understand the key points of computer operation, which leads to the incomplete knowledge of many students, and greatly reduces students' learning enthusiasm, with low efficiency for classroom teaching.

3. Application of action oriented teaching method in university computer

The teaching methods of action oriented teaching method can be divided into many kinds. The methods can be used separately or integrated, and can be selected according to the actual situation. The following are several common classifications of action oriented teaching methods.

3.1 Simulation teaching method

The main goal of simulation teaching method is to divide teaching environment and teaching method into two categories: simulation equipment and simulation environment. Because the simulation situation can be similar to the simulation of the real scene, this teaching method can stimulate students' interest in participation to the maximum extent. Therefore, the most commonly used teaching method in colleges and universities is to carry out computer teaching through the simulation situation. In this teaching mode, students must do their best to complete the homework, with obvious effect, which is much progress than before. Generally speaking, vocational schools generally choose to study in factories, while economics schools will choose to

do simulation learning in offices or companies. In the actual operation process, teachers often need to select the appropriate place according to the classroom content in advance and use relevant props to simulate a realistic scene for students and guide students to the corresponding environmental atmosphere. Through the practice of these scenarios, students can usually find their own shortcomings and find some suitable methods to solve them, which can greatly improve their ability to deal with the corresponding difficulties in the future. The cost of simulation teaching is low, and it can provide students with a lot of practice opportunities, giving them enough time to adapt. Therefore, simulation teaching method is one of the relatively popular teaching methods in action oriented teaching method.

3.2 Task teaching method

Task based teaching method provides students with corresponding professional skills training based on professional tasks, and helps them build corresponding professional theoretical knowledge system. Its core idea is “based on work tasks”. In terms of the traditional teaching concept, learning theoretical knowledge and practical learning are separated, that is to say, learning is only to draw relevant symbols from books. For example, many schools simply teach in the classroom, and will not extend it to the work task. This teaching method is very unfavorable to the improvement of students’ comprehensive level in a certain sense, especially in the future In the teaching of computer courses in colleges and universities. The task-based teaching method, an action oriented teaching method, can make up for this shortcoming and improve students’ cognitive level and operation level as a whole. It can also improve students’ practical ability and reaction ability in computer teaching in colleges and universities.

3.3 Brainstorming

Brainstorming refers to a learning method in which most people discuss the same problem together in a short period of time in order to get more ideas and opinions. This method often occurs in the classroom or in the company’s decision-making, the teacher solicits everyone’s views on a controversial issue, and everyone can express their opinions and draw more conclusions. To a great extent, this method can stimulate students’ enthusiasm and desire to express their views, which is conducive to the cultivation of students’ creative thinking.

4. Conclusion

To sum up, action oriented teaching method plays an important role in computer teaching reform in colleges and universities. For example, task-based teaching method can systematically combine the knowledge of character symbols with practical operation system to improve students’ comprehensive ability; brainstorming method can enable students to gain more views in a short time and broaden their own ideas. Computer teaching is a kind of subject with strong practical operability, and it is widely used in society. Therefore, combining books with practice and adopting action oriented teaching method will be of great help to the teaching of computer science.

References

1. Wang R, Long Z. Discussion on the application of action oriented teaching method in higher vocational computer teaching reform. *Southern Agricultural Machinery* 2020; 51(9): 182.
2. Gao X, Cao L, Geng Q. Application of action oriented teaching method in computer teaching reform in colleges and universities. *Theoretical Research and Practice of Innovation and Entrepreneurship* 2020; 3(3): 67-68.
3. Chen H. Application of action oriented teaching method in the teaching reform of basic computer application course. *Information System Engineering* 2019; (11): 155-156.
4. Wu Q. On the application of action oriented teaching method in computer teaching reform in colleges and universities. *Examination Weekly* 2019; (4): 138.
5. Zhang A. Application of action oriented teaching method in computer teaching reform in colleges and universities. *Southern Agricultural Machinery* 2018; 49(21): 147+154.
6. Jia J, Chai L. Analysis of the application of action oriented teaching method in college computer teaching reform. *Computer Products and Circulation* 2018; (9): 168.