

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

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Abstract: in the computer teaching reform of colleges and universities, teachers combine their different learning characteristics with the teaching materials structure of National University, and create a variety of teaching situations for students by means of modern simulation teaching method, and stimulate students' interest in computer science and technology research. Then, the teaching methods of task, project and brainstorming are taken as action guidance to guide students to explore the relationship between computer operating system and scientific and technological work in various forms of teaching activities, so that they can find more scientific and technological knowledge in the process of computer operation exercise and accumulate more computer operation experience in the ocean of scientific and technological knowledge. It is not only conducive to improve the students' communication ability of cooperation with people, to train the students' computer practical operation ability, but also to cultivate students' self-study consciousness, to develop good learning habits, and to consolidate their comprehensive ability.

1. Introduction

In the computer teaching reform of colleges and universities, teachers, considering the students' learning needs, create various educational activities for students with diversified teaching forms, which will make students instinctively combine the operating knowledge learned in the classroom with the actual scientific and technological work, and then enhance their own ability of scientific and technological hands-on. It is not only conducive to the cultivation of students' comprehensive literacy, but also to improve their initiative. The following part is a brief introduction of the problems and application strategies in the computer teaching in Colleges and universities, hoping to have a reference for the majority of college educators.

2. Problems in Computer Teaching in Colleges and Universities At Present

2.1 Obsolete Teaching Mode

With the continuous progress of socialist science and technology construction, the National Education Department has also put forward a new teaching reform standard for the computer teaching in Colleges and universities. It requires teachers to integrate action oriented teaching methods in the actual educational reform process, and create wonderful practical teaching activities for students in various teaching forms, so as to make students' computer operation ability and science and technology The ability of application is well trained and improved, so that students can master more abundant scientific and technological learning methods and improve the overall teaching effect. However, through the author's relevant investigation, we find that there are still many problems in the computer teaching in Colleges and universities at present. On the one hand, many teachers are still reluctant to come out of the education idea of “self-centered” because of the influence of the past examination oriented education thought. Therefore, they have always adopted the old duck filling teaching mode to implement the instilling education thought to the students, so that the students passively accept the theoretical knowledge transmitted by the teachers. It is not known that this traditional, old teaching mode and a large amount of theoretical education knowledge can not arouse students' interest in computer science and technology research, but will cause great pressure on students' learning, and even lose their original learning motivation. Teachers should correctly recognize the shortcomings in their teaching, establish the concept of “student oriented” education in time, optimize their teaching behavior, and create a wonderful teaching atmosphere for students with various forms of teaching activities as the carrier. Only by fully stimulating and exercising students' interest in computer exploration and enthusiasm for scientific and technological research can we make computer teaching reform in Colleges and Universities Implementation of the work [1].

2.2 Single Teaching Method

In the development of computer teaching reform in Colleges and universities, only by constantly innovating teaching methods and changing teaching means can teachers improve students' interest in computer research and teaching, and enable students to master more abundant practical operation methods. However, after the author's actual investigation of several universities in China, it is found that there are still some educational problems in the current education. Among them, the most prominent is the lack of practical ability of students caused by the single teaching method. On the one hand, due to the influence of traditional teaching experience, many teachers are still using a single teaching method, teaching students limited textbook teaching knowledge, and did not follow the pace of social development, timely adjust their own teaching plan. On the contrary, relying solely on their own superficial cognition of the textbook structure, they transmit some superficial textbook knowledge to the students, without connecting the teaching content with the students' real life and professional development, resulting in the students' lack of practical operation ability, unable to integrate the important knowledge points in the textbook into the actual training tasks, and lack of effective practical experience. On the other hand, in daily teaching, teachers will arrange a large number of classroom assignments for students after teaching, so as to exercise students' application ability. However, this kind of teaching method not only can not stimulate the enthusiasm of students, but also can make students have a rebellious and antagonistic psychology and reduce the efficiency of learning. Teachers should adjust their teaching methods, innovate teaching forms, and create some practical activities close to students' real life according to the characteristics of students' interests, so as to cultivate students' interest in autonomous learning and let students master more computer science and technology knowledge [2].

3. Application Strategy of Action Oriented Teaching Method in College Computer Teaching Reform

3.1 To Improve the Teaching Mode by Simulation and Task Teaching Method

In the development of computer teaching reform in Colleges and universities, teachers have to connect the students' real computer operation level, scientific and technological research ability with the structure of teaching materials, improve the teaching mode, optimize the teaching methods, and innovate the teaching design with simulation, task and other teaching methods, so as to change the overall teaching effect and make the computer teaching reform in Colleges and universities smoothly implemented. First of all, teachers can connect the real interest characteristics of students at this stage with the structure of teaching materials, create a classroom situation corresponding to the content of teaching materials for students with the help of simulation teaching method, create a real teaching scene and environment atmosphere, stimulate students' self-learning awareness of computer science and technology knowledge, and make students maintain long-term exploration enthusiasm for this major. Secondly, teachers can combine students' real computer operation level with the content of teaching materials, design a series of related teaching problems around the teaching theme by using the relevant symbolic features in the teaching materials, inspire students' awareness of problems, and let students actively link computer teaching knowledge with practical training under the influence of strong classroom atmosphere, so as to fully exercise their thinking reaction Ability and practical operation ability. It not only helps to clarify students' action goals and explore their creative potential, but also enhances their practical ability and practical ability.

For example, when learning the contents of “circuit principle and analog electronic technology” in the basic courses of computer major in Colleges and universities, teachers can simulate the classroom environment related to the teaching materials for students through modern intelligent devices or in the training base, so as to create a good teaching atmosphere. Then design a series of related teaching problems for students around the teaching theme, arouse students' awareness of problem research, let students connect teaching knowledge with real life and professional nature in the simulated scene, explore students' wisdom potential, and let students independently complete the learning tasks set by teachers according to the corresponding action goals [3].

3.2 Using Project Teaching and Brainstorming to Improve Classroom Teaching Efficiency

In the process of computer teaching reform in Colleges and universities, teachers should deeply analyze the past teaching methods and teaching effects, introduce modern project teaching method and brainstorming teaching method, reform the classroom teaching system, encourage students to express their own opinions and opinions in the classroom, so that students can summarize better learning experience through the comments of teachers and students Learning methods, and then improve their learning effect. First of all, teachers can combine the project teaching method with students' actual learning level, and use professional drawing software to design different kinds of education goals for students at different levels, so that students can connect computer related theoretical knowledge and scientific skills, and form their own unique knowledge structure in the brain, so as to enrich their professional ability. Secondly, teachers use brainstorming teaching method in the classroom to create relevant learning ideas for students in the limited teaching time, trigger students' discussion and communication, and let students negotiate more solutions for controversial problems, so as to improve students' classroom learning enthusiasm and the overall teaching efficiency [4].

For example, when learning “Java language, graphics, artificial intelligence, human-computer interaction” and other related contents in college computer textbooks, teachers can design different kinds of course materials for students at different levels with drawing software according to their real computer operation basis, so that students can form their own ideas according to their past learning characteristics and their own plans In order to establish the appropriate learning objectives.

Then the teachers guide the students to discuss the controversial teaching problems in groups, so that the students can break through the previous cognitive limitations of teaching and summarize better solutions to the problems with the help of the thinking of the team members. This kind of oriented teaching mode can not only cultivate students' autonomous learning ability, but also improve students' thinking innovation ability, and consolidate students' comprehensive ability to find and solve problems [5].

4. Conclusion

In a word, in the process of computer teaching reform in Colleges and universities, teachers must combine the existing objects in the current teaching, formulate the corresponding reform strategies, take the action oriented teaching method as the carrier, so that the teaching reform can be effectively implemented in the specific education process, so as to improve the education system and improve the education effect.

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