Research on the Precision Teaching Reform of Computer Courses in Higher Vocational Colleges under the Background of Smart Classroom

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Abstract: under the Background of Rapid Development of the Internet, Higher Vocational Colleges Have Actively Carried out the Construction of Smart Classrooms, Which Have Already Achieved Great Results and Also Provided Possibilities for the Development of Precision Teaching Models. However, with the Increase in the Number of Students, Computer Courses in Higher Vocational Colleges Have Been Difficult to Meet the Current Teaching Needs. in This Context, It is of Great Significance to Apply Precision Teaching in the Reform of Computer Courses in Higher Vocational Colleges. Therefore, This Paper First Analyzes the Current Problems in Computer Course Education in Higher Vocational Colleges, and Further Analyzes the Principles That Should Be Followed in the Computer Course Reform, and Proposes Specific Processes and Methods, in Order to Provide a Theoretical Basis for Follow-Up Scholars.

1. Introduction

1.1 Literature Review

In recent years, more and more scholars have turned their attention to the study of computer curriculum reform in higher education institutions. Li Yingjie pointed out that with the continuous development of network information, college education has gained a lot of room for development, and classroom teaching continues to reform and deepen (Li, 2017). Zhao Shijun pointed out that the traditional teaching mode has been difficult to adapt to the current teaching development needs of higher vocational colleges (Zhao, 2015). Zhang Lijuan pointed out that the traditional teaching mode has long been unable to adapt to the current teaching needs of higher vocational colleges, mainly because of the lack of practical activities and outdated teaching content. This feature is more obvious in computer teaching courses in higher vocational colleges. Therefore, Zhang Lijuan puts forward several reform opinions on computer education in higher vocational colleges according to the actual situation (Zhang, 2015). Li Shijin pointed out that computer application is one of the indispensable courses in higher vocational colleges. In the context of the new era, how to effectively master the law of computer development and understand the operational performance of computers has become the main task of the basic course of computer application in higher vocational colleges (Li, 2015).

1.2 Purpose of Research

At present, with the continuous expansion of higher vocational colleges, the number of students has shown a sharp growth trend. Under this background, the shortcomings of the traditional education model in higher vocational colleges have gradually become prominent, including the lack of self-study resources, the lack of teachers, and the single mode of teaching. In recent years, with the development of Internet big data technology, precision classrooms have been widely used in higher vocational education, which provides new opportunities for higher vocational colleges' teaching reform. The computer course plays a fundamental role in the teaching process of higher vocational colleges and can provide a basic role for the smooth development of other courses. At the same time, the popularity of the Internet has made higher vocational colleges actively carry out smart classrooms. Therefore, in the context of smart classrooms, this paper studies the application of precision courses in computer curriculum reform in higher vocational colleges.

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2. Analysis on the Status Quo and Problems of Computer Course Development in Higher Vocational Colleges

n recent years, after the rapid expansion of higher vocational education, it has entered a period of steady development. Therefore, during this period, expanding the number of enrollment is no longer the focus of higher vocational colleges. Many higher vocational colleges have made it more important to improve the cultivation of talents (Yin, 2013). The key to improving the quality of talents in higher vocational colleges is to cultivate students' practical ability. Specifically, higher vocational colleges are mainly divided into professional skills and vocational skills. In this process, computer application ability has become an important task in cultivating students' professional literacy and professional ability, and it carries the application ability and information processing ability of higher vocational students. However, due to the short history of domestic computer development, colleges and universities still face many difficulties in carrying out computer-based courses, mainly in the following aspects.

First, there are differences in student bases. At present, when vocational colleges carry out computer-related courses, the primary problem is that students' computer foundations are different. The main reason for this phenomenon is that there are differences in the level of economic development in various regions, resulting in different information processing capabilities and information capabilities in different regions(Wang, 2014). For example, some areas have started computer basic education courses from elementary school. In some areas, just to deal with the information technology study of the college entrance examination, only a small number of related courses are offered in the high school stage. What is more serious is that some areas do not have courses at all. Therefore, students in different regions have a large gap in the basic level of computers. In addition, the family environment is also an important factor in determining the student's computer level. Among them, some families began to develop students' information processing ability and computer operation ability when students were very young. However, there are still some families who have neglected the development of students' computer operation ability in order to allow students to study hard. This factor is also one of the main reasons for the large differences in the basic level of computer science.

Second, teaching resources need to be improved. At present, with the rapid expansion of higher vocational colleges, the number of students shows a rapid increase. However, teaching resources are difficult to match the number of students. Therefore, the status quo of imperfect teaching resources is presented. On the one hand, although the development of information technology and big data technology shows a rapid growth trend, the application of computer education process in higher vocational colleges still needs a long process, so the computer courses of higher vocational colleges are represented as teaching to a certain extent. The system is imperfect and presents technical difficulties in the specific teaching process (Xu, 2012). On the other hand, the use of multimedia resources in computer courses in higher vocational colleges, many cases are compiled by teachers based on past teaching experience, and combined with the actual application, to a certain extent, the teaching content is out of touch with the actual situation, making It is difficult for talents trained to meet market demand.

Third, the teaching time setting is unreasonable. The computer basic course is offered to improve the information processing ability and computer operation ability of students to a certain extent. However, in the actual situation, in the process of setting up the computer professional teaching in higher vocational colleges, in many cases, only the professional course time setting is emphasized, but the computer basic course setting is ignored. For example, some vocational colleges offer fewer basic courses in computer science in one semester, and only two classes per week. Due to the limited set of class time, the teacher is mainly to complete the teaching tasks, and then neglect the students' practical activities, so the knowledge points learned are few and far between. In addition, due to the less time setting in the higher vocational colleges, the communication and interaction between teachers and students is relatively lacking, which further leads to the low quality of the overall teaching of computer basic courses.

3. Principles of precision teaching reform of computer courses in higher vocational colleges under the background of smart classroom

There are many problems in the current teaching process of computer courses in higher vocational colleges. Therefore, it needs to be reformed. At the same time, the teaching of precision courses provides an opportunity for the reform of computer courses. Therefore, this paper further studies the principles that need to be paid attention to when teaching computer courses in higher vocational colleges.

3.1 Timely Feedback

Under the background of the wisdom classroom, the higher vocational colleges carry out the precise course teaching, and the teachers need to judge the specific direction of the computer teaching class in time according to the feedback of the students, and adjust the teaching methods in time. At the same time, the teacher should also complete the specific control of the teaching progress and details according to the feedback of the students, and achieve the purpose of improving teaching efficiency and quality. In the traditional teaching mode, the students' feedback mainly comes from the question and answer session in the classroom and the specific curriculum performance. The teacher carefully organizes the feedback of the students. This feedback mode can help teachers communicate effectively to a certain extent. However, this kind of feedback mechanism is mainly based on the specific observation of the students according to the performance of the students, and there is certain subjectivity. In response to this phenomenon, in the exhibition of precision courses, teachers need to actively use Internet technology to grasp the progress of students' learning through data forms. At the same time, teachers should also analyze the feedback data of students in time to understand the knowledge of students.

3.2 Evaluation Principle

Accurate classroom requirements require students to adjust their next teaching methods in a timely manner. The traditional teaching mode is mainly based on the students' daily learning, through the form of examinations, and grasping the students' learning situation for evaluation. The Precise Teaching Course requires teachers to combine Internet technology to keep abreast of the students' daily learning situations and collect them in the form of data. Through the data teacher, you can understand the specific learning situation in the actual teaching process and formulate corresponding solutions. At the same time, accurate classroom teaching can use information technology to help students develop the habit of fragmented learning. Students combine classroom learning with fragmented learning in the actual learning process, which can quickly promote the rapid development of English teaching results in practical teaching.

4. Process and Method of Precise Teaching of Computer Courses in Higher Vocational Colleges

The implementation process of precision teaching of computer courses in higher vocational colleges requires the following steps to be implemented.

First, teachers should develop corresponding learning plans for students' computer learning, including learning objectives and learning plans. Teachers make precise plans for different students by making plans. At the same time, in the actual teaching process, according to the completion of the students' academic study, they pay different attentions. In addition, students can develop their own teaching objectives according to the teacher's teaching objectives, and thus improve the computer learning effect.

Second, teachers should develop relevant learning materials for students based on their knowledge of computer knowledge. At present, in the traditional teaching mode, the computer learning materials of higher vocational colleges mainly come from the textbooks. Among them, the textbook includes the materials that most students want to learn. However, on the other hand, computer learning is not only a simple grasp of operating technology, but also needs to expand

some common computer terms in everyday life. Therefore, in this process, teachers need to develop relevant learning materials based on the demand for computer technology in social production.

Third, teachers need to study the data tables formed during the student's learning process. Due to the particularity of the computer learning process, students can master the operational skills in the learning process to form a summary of student learning. At the same time, teachers can use the Internet big data technology to analyze students' learning at different times. Based on these data, teachers can make specific teaching strategies to promote the quality of computer teaching. Fourth, in the actual computer teaching process, teachers should effectively measure the student's learning situation. Through analysis and comparison of data between different students, combined with the students' usual performance, the students' learning situation and learning attitude are derived. Finally, teachers should reflect on the current teaching situation in light of the students' learning situation.

5. Conclusion

At present, there are some problems in the teaching of computer courses in domestic vocational colleges. At the same time, with the development of Internet big data technology, accurate classroom teaching provides a good opportunity for computer teaching courses in higher vocational colleges. Therefore, this paper analyzes the principles that need to be followed in the computer classroom application, as well as the specific processes and methods, in order to provide a theoretical basis for the reform of computer courses in higher vocational colleges.

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