Research on Improving the Efficiency of Computer Teaching under the Intelligent Class Mode

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Abstract: Currently, some students have a serious phenomenon of being weary of studying, and outdated teaching method is one of the fundamental reasons, besides, it is even one of the biggest problems faced by education. Under the background of intelligent education, the construction of intelligent class is currently a hot research field for educators. Intelligent class is a new class teaching mode, which integrates moral wisdom, rational wisdom, practical wisdom, value wisdom and other wisdom. Taking "teaching—experiment—comprehensive practical training" as the teaching means, it aims to cultivate students' ability to analyze and solve problems, which is conducive to improving students' ability of independent learning and collaborative learning. This article aims to explore the construction ideas and methods of computer intelligent class, in order to promote the deep integration of information technology and education, and achieve deep transformation and innovation in computer teaching[1].

1. Introduction

In recent years, China has promoted educational informatization vigorously, and made efforts to integrate information technology with education and teaching, however, the application of information technology remains at the shallow and auxiliary level of supporting the original teaching mode. The classroom teaching mode is still outdated, and the teaching methods are relatively single, which are not attractive enough to attract students' attention to listen to their teacher for the reason that the class appears dull, indicating the actual learning situation of students. The intervention of information technology has not eliminated the most fundamental problems in class, making the construction of intelligent class particularly important in this background. On the other hand, with the continuous progress of society, many emerging teaching and education platforms have emerged, such as flipped class, intelligent class, blue ink cloud class, MOOC, and superstars, etc., which not only enrich traditional teaching methods, but also stimulate students' learning enthusiasm and cultivate their sense of teamwork. Especially in recent years, more and more scholars have begun to explore how to transition from traditional class to Intelligent Classs. The so-called intelligent class refers to a form of class teaching that applies modern educational concept and information-based teaching methods to modern class, aiming to cultivate the open and

innovative thinking of contemporary college students and stimulate their learning enthusiasm. The intelligent class has transformed the traditional model of teachers giving the main lecture and students being pleasantly taught into a teacher-student interaction mode, into the class teaching more flexible, vivid, intelligent, efficient, and information-based. This article is based on the intelligent class model to explore how to improve the teaching efficiency of computer[2].

2. Part One The Basic Theory of Intelligent Class

2.1 The Concept of Intelligent Class

The proposing concept of intelligent class is closely related to the concept of intelligent campus. The so-called intelligent campus is based on the construction of concept of "digital intelligent campus", utilizing emerging network technologies such as massive data, cloud computing, and the Internet of Things to achieve intelligent management of the campus, in order to maximize the realization of intelligent campus services and management model. Based on years of practical experience in education and teaching, and from the perspective of intelligent education in the current environment, I believe that the construction of intelligent class should create a relaxed, enjoyable, proactive, high-quality, and efficient learning environment and process for students. During this process, I will continuously improve students' intelligence, enhance their advanced thinking and innovation abilities, and cultivate modern intelligent talents. The cultivation of wisdom should be the ultimate goal throughout the entire class teaching, achieving the teaching goal of enhancing students' intelligence, enabling them to discover problems with innovative thinking, and solve problems with intelligent methods. Based on the above, this article defines a intelligent class as a personalized, intelligent, digital, efficient, proactive, and interesting new type of class built with the ultimate teaching goal of cultivating wisdom and the support of information technology[3]. An intelligent class consists of several parts, including class teaching, knowledge system, statistical analysis, and other settings. Among them, class teaching includes teacher logs, intelligent class, class management, and micro classes; The knowledge system consists of three parts: a knowledge tree, a question bank, and my class; Statistical analysis includes my students, teaching analysis, and class reports; Other settings include password settings and modifications for teachers and students, unbinding and unbinding for students, scanning login, etc. Taking class teaching as an example, explain in detail the construction process of an intelligent class. Intelligent class is one of the components of class teaching. Firstly, adding a curriculum, which refers to the classes and courses led by the teacher; Secondly, construct class activities, consisting of teaching resources, class members, new activities, start roll call, class information, and question bank management. The substitute teacher will publish teaching resources such as courseware and PPTs on the platform in advance for the use of students in their respective classes; The new activity is the core of building a smart class, consisting of real-time Q&A, brainstorming, classroom quizzes, voting questionnaires, Q&A discussions, homework tasks, classroom performance, and student ratings.

2.2 The Main Features of Intelligent Class

The main characteristic exhibited by intelligent class lies in the essential differences between the roles of teachers and learners and those of traditional classes. In the intelligent class, teachers need to play more roles as facilitators and guides, and creatively choose and design teaching methods and learning strategies on the basis of intelligent analysis and judgment of students' learning conditions, so as to create a smart environment for students to truly realize active learning, personalized learning, interactive learning, and mobile learning, and to complement students' learning process

with positive feedback and emotional stimulation, and assist students in the construction of knowledge and skills and the cultivation of intellectual abilities. In the intelligent learning environment created by teachers, learners abandon the passive acceptance of knowledge in traditional teaching and boldly discover, conceive, explore, and collaborate to solve a certain problem in the learning atmosphere created by teachers. Through the process of problem-solving, learners improve their comprehensive abilities, accumulate thinking experience, and grow into new talents with intelligent abilities[4].

3. Part Two Research on the Practical Application of Intelligent Class in Improving Computer Teaching Efficiency

3.1 The Basic Ideas of Building an Intelligent Class

Based on the above definition of the concept of intelligent class and the analysis of its main characteristics, the author believes that the construction of intelligent class must achieve the following steps:

Firstly, let students active learning. Create a situation with the help of information technology to set students with problems worth thinking and studying or tasks that need to be completed urgently, and solving the problem or completing the task just needs the knowledge or skills to be learned in this lesson;

Secondly, enable students to learn easily and happily. In the background of information technology, students can find effective methods and means to solve difficult points in new knowledge through certain efforts;

Thirdly, enable students to discover, conceive, and create. So, it must be regarded as a teaching goal, reflected in the setting of learning tasks, and tasks that enable students to ask questions must be set;

Fourthly, enable students to become new talents with rich minds, spirituality, perfect personality, and high comprehensive qualities, and internalize this moral education training goal in subject teaching in intelligent class;

Fifthly, enable both teachers and students to dynamically grasp the learning trends. The method is to use scientific and intelligent testing methods in the information technology environment to intelligently and dynamically obtain students' dynamic learning data, and make intelligent analysis and judgments. Based on this, select and create appropriate teaching modes[5].

3.2 Practice and Case Analysis of Intelligent Class Construction

This paper takes the application of mind mapping in the design of short video shooting ideas in film and television production as an example to conduct the following analysis.

Firstly, the setting of teaching objectives. First of all, knowledge objectives. Namely, understanding mind map. Then, skill goals. Students are required to use mind map templates to clarify their shooting ideas[6].

Secondly, design teaching methods. The previous teaching method is for computer teachers to directly provide mind map templates, which are filled out by students. In the intelligent class mode, the following improvements have been made to previous teaching methods. Firstly, guide students to reflect on their past shooting experiences and identify problems with their shooting ideas. Secondly, sort out and summarize the problems. Thirdly, guide students to analyze existing problems, envision and seek solutions. Fourthly, carry out student group cooperation and use thinking to guide the group's shooting ideas based on the theme designated by the teacher. Fifthly, each group displays their own works and provides commentary and self-evaluation. Sixth, students

vote and evaluate the works of each group based on the evaluation criteria provided by the teacher. Seventh, teachers provide comments and feedback.

Finally, pay attention to information technology tools and applications. Firstly, set an integrated class with photography and camera equipment, and get ready for the devices equipped with electronic whiteboards, physical projectors, high-definition multi angle real-time projection cameras, etc. Secondly, the establishment of a mobile terminal teaching platform. For example, the Blue Ink Cloud Class. Thirdly, the allocation of teaching resources. Namely, design learning task sheets, micro lesson videos, and teaching courseware[7].

3.3 Analysis of Computer Teaching Effectiveness in Intelligent Class

Research has shown that the vast majority of students are able to seriously think about the assignments assigned by their teachers and complete the aforementioned class activities within the specified time frame, rather than blindly completing the tasks assigned by the teachers. Brainstorming is highly favored by students. Compared with the traditional teaching mode, the intelligent class teaching mode can effectively improve the autonomous learning ability, collaborative learning ability and team cooperation ability of vocational college students. In the intelligent class teaching mode, the course "Fundamentals of Computer Application" achieves flexibility, intelligence, and informatization in three stages: pre class, in class, and post class, through situational dialogue, problem-solving, and problem-solving. According to statistics, the attendance rate of this course has reached more than 92%, and students' ability to discuss problems and collaborative learning in class has reached 73%. Students' practical skills in Word comprehensive layout, Excel advanced data operations, PowerPoint production, and other practical operations have been significantly improved, especially in PPT production and Word comprehensive layout, where excellent works are abundant[8].

3.4 Case Review

Cultivating intelligent new talents is the highest level of education, and to achieve this level, the prerequisite is that educators have such ideas in their minds. Creative thinking ability is definitely not cultivated by learning how to transform knowledge into ability, but by creating an environment where, with the support of technology and resources and the guidance of teachers, students try, discover, conceive, and comprehensively apply knowledge and skills to solve problems. Through experiencing the process and accumulating corresponding thinking experience, they can achieve the improvement of high-end thinking ability and creative ability. Students must fully exert their initiative to participate and invest in the classroom in order to be interested, which is what traditional vocational classroom teaching lacks. For example, the case in this paper, the teacher directly provided the captured mind map model to students, leaving only a few gaps in the model for students to fill in, thus losing the process of bold exploration and verification of ideas[9]. The construction of a smart classroom does not rush to present the final results, but first guides students to discover and analyze problems, and then actively seeks solutions to problems. Throughout the entire process, the information technology environment and related resources provide hardware, software, and environmental support for the construction of intelligent class, fundamentally achieving the revolutionary application of information technology in class teaching. Computer related courses are courses that require high theoretical and practical requirements for students. In the current era of interconnected technology, the teaching of computer courses aimed at students should also actively apply new technologies and methods, especially by strengthening the construction of intelligent class, allowing students to exercise more autonomy, adopt more flexible and diverse ways of learning, and improve their overall effectiveness in computer course learning.

Then, it can be enable students to feel the richness and satisfaction brought by computer courses. The construction of an intelligent class has different requirements for both teachers and students compared to before, so it is different from traditional teaching methods or an important supplement or transformation of traditional teaching. Computer education and teaching are facing unprecedented challenges, while also placing higher demands on vocational computer education. Therefore, advanced and appropriate computer education methods are particularly important in improving the quality of computer teaching and students' computer literacy[10].

4. Conclusion

Exploring the advantages, disadvantages, and practical value of smart classrooms in computer course teaching has to some extent changed the ability of teachers and students to accept new knowledge, new ideas, and information technology, changed the traditional teaching mode, and catered to the innovative learning and teaching mode of informatization and networking. It has practical significance to connect the past and the future. In the context of the modernization of education, the practice of intelligent education is endless. The application of information technology should not only be positioned at the shallow level and auxiliary level to support the original teaching model. There are still many problems on how to properly integrate information technology with education and teaching. What are the tools and resources to support inquiry learning and collaborative learning, How to build and provide these tools and resources remains the main goal and direction of our practice and research on smart education. The author will continue to explore and explore in practice.

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