

The Effective Application of Interactive Electronic Whiteboard in Primary School Mathematics Teaching

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Abstract: The flexible use of modern educational means can not only enable students to establish a solid knowledge structure, but also improve the effectiveness of the classroom to ensure that students have an accurate grasp of the knowledge. Especially in the primary school mathematics teaching, because it contains a lot of knowledge, and some of it is very complicated, so in the learning, it is often affected by a variety of factors, it is difficult to solve the problem successfully, let alone apply them to real life. Therefore, teachers should take the initiative to reform in the actual teaching, and combine the interactive electronic whiteboard and other technology with mathematics, so as to improve the teaching effect. Based on this, the paper studies and analyzes the effective application of interactive electronic whiteboard in primary school mathematics teaching.

Keywords: Interactive; Electronic Whiteboard; Elementary Mathematics.

1. Introduction

Interactive electronic whiteboard is an application form of information technology in teaching, which can create an interactive teaching atmosphere and provide students with a lot of teaching resources. Compared to traditional chalkboards, the interactive whiteboard replaces chalk with an electronic pen, ensuring smooth writing while also creating a sustainable and environmentally friendly campus environment for the school. In addition, the interactive electronic whiteboard records the content of teachers' blackboard writing, which can effectively reduce the problem that students miss the review opportunity because they fail to keep up with the notes after teachers erase the traditional blackboard.

2. The Importance of the Application of Interactive Electronic Whiteboard in Primary School Mathematics Teaching

(1) Create teaching situation

Teachers should create a lively and interesting classroom situation, so that students can actively participate in mathematical exploration, so that they can experience the charm of mathematics while looking for rules on their own. In the traditional teaching method, teachers present knowledge and skills to students, which is difficult to arouse their interest, thus affecting the teaching effect of mathematics. Since mathematics is a subject involving operation and application, teachers should not only emphasize operation and ignore application in teaching. Therefore, students should realize the mystery of operation rules in teaching practice. In the process of inquiry, interactive electronic whiteboard can be used to create an active learning atmosphere, so as to guide students to learn to use in inquiry and improve teaching quality. [1]

(2) Multiple presentation of knowledge

Mathematics has the characteristics of strict logic, concise expression and rigorous structure. In the teaching of mathematics, teachers can transfer students from familiar fields to the exploration of new knowledge on the basis of

existing knowledge, and carry out teaching design to present various aspects of knowledge according to their learning situation, so that they can master new knowledge faster. In the application of interactive electronic whiteboard, teachers should play its role of "magnifying glass" and "spotlight", so that students can better complete the learning of new knowledge and review of old knowledge, so as to improve students' learning efficiency and learning interest.[2]

(3) Keep close contact with daily life

In mathematics teaching, we should not only focus on textbooks, but also connect some educational resources in students' life, so as to improve the effectiveness of mathematics teaching. Mathematics is closely related to people's lives. If teachers connect these knowledge with actual life, students will feel that the mastery of mathematical knowledge is not a difficult thing, but will become a happy exploration. Therefore, in the actual teaching process, through the use of interactive electronic whiteboard, to learn the mathematical principles of the image in front of students, can improve their intuitive cognition level. In teaching, teachers should be flexible and not rigid. The more open they are in teaching, the closer they can get to students. On the other hand, if the classroom teaching content is too closed, it will drive students away from mathematics. Therefore, mathematics teachers should combine the specific situation of teaching and students' learning needs, and make appropriate adjustments to the education mode in order to better meet the needs of students, so as to promote their thinking and ensure that every student can develop a good learning habit.[3]

3. The Application Value of Interactive Electronic Whiteboard in Primary School Mathematics Teaching

(1) Stimulate learning enthusiasm

In the actual teaching of mathematics classes in primary schools, it is difficult for students to have a deep understanding of abstract mathematical concepts through conventional teaching methods, which results in students' mental dispersion during learning and lack of solid knowledge of what they have learned. In the long run, students will feel resistant to mathematics classes. The

application of interactive electronic whiteboard to primary school mathematics teaching can show its unique superiority. Such an information-based teaching software not only contains a large number of teaching resources, but also can use animation and various audio to focus students' attention, so that they can have an intuitive understanding of the practical value of mathematical knowledge, but also can change students' negative emotions in teaching and mobilize their enthusiasm. This will lay the foundation for teachers to build a more effective primary school mathematics education system. In addition, the use of interactive electronic whiteboard can also allow teachers and students to have more interaction and communication, the mathematical theory and life closely together, so that students have a deeper understanding of mathematical knowledge in the process of interaction, so that students can better understand mathematical knowledge.[4]

(2) Improving the quality of teaching

In primary school mathematics teaching, the knowledge is generally more abstract, especially some mathematical concepts, calculation formulas, in order to get the correct answer, you must be carefully derived and calculated. However, primary school students are in the early stage of cognitive development, and their logical thinking level is not perfect, so in the process of solving problems, they often make mistakes due to carelessness or insufficient understanding of the problem, which will reduce their enthusiasm for learning, but also make them lose confidence. The application of interactive electronic whiteboard in primary school mathematics classroom can help teachers to carry out targeted teaching for different students, so that they can understand their shortcomings in mathematics more objectively, and then carry out targeted exercises to improve teaching quality.[5]

(3) Create a good atmosphere

Under the traditional educational concept, many teachers often simply instill mathematical theoretical knowledge in mathematics education, resulting in passive acceptance of students, so that they can not actively learn according to their own cognition. Because of the different level of mathematical knowledge of primary school students, there are some differences in their learning, which leads to the uneven teaching effect. Therefore, the introduction of interactive electronic whiteboard in primary school mathematics teaching can not only enable students to deepen their understanding and cognition of mathematics knowledge, but also improve the classroom atmosphere, optimize classroom activities, create a good atmosphere, etc., so that students can better answer math problems, and at the same time, design a variety of different teaching contents in a targeted and hierarchical way. Enable students to learn according to their own level, in order to promote the learning effect of students. [6]

(4) Constructing mathematical thinking

According to the needs of quality education, when teaching mathematics in primary schools, teachers should not only impart basic knowledge to students, but also train them in logical thinking and mathematical thinking structure, so that they can apply the mathematical knowledge they have mastered to practical problems in daily life. The application of interactive electronic whiteboard in primary school mathematics teaching can enable teachers to cultivate students' good mathematical thinking ability imperceptibly. With the support of information technology, primary school

students can better carry out practical operations. In the process of independent inquiry, they can more intuitively understand the mathematical knowledge they have mastered, and integrate the knowledge they have learned into their own life, so as to promote their thinking activities in mathematics learning. This has a very positive effect on the development and improvement of students' core mathematical literacy.

4. Interactive Electronic Whiteboard in Primary School Mathematics Teaching Application Path

(1) Create an environment to stimulate interest

In primary school mathematics teaching, using interactive electronic whiteboard can create a positive teaching atmosphere and improve students' interest in learning. At present, some primary school mathematics teachers are changing their educational concepts, using the method of situational teaching to break the previous single teaching method, so that students' learning enthusiasm can be improved to a greater extent, so that their mathematics learning ability can be greatly improved. Through the use of interactive electronic whiteboard, mathematics teachers can show mathematics knowledge to students in a more intuitive and vivid way, create a more real and interesting learning atmosphere for them, in order to mobilize their perception and promote their mathematical thinking, so as to lay a good foundation for future learning. In the "Vertical and Parallel Lines", teachers should aim at the cognitive ability of students during this period, based on their familiar life situations and experiences, to create a suitable learning environment for them. Through the analysis of the picture, combined with the actual situation in life, guide students to find and understand the relevant vertical and parallel lines. Using the zooming function of the interactive electronic whiteboard, some specific contents in the picture are displayed, so that students can intuitively feel the commonality of various images, and also guide students to discuss. [7]

(2) Enhance classroom interaction

The application of interactive electronic whiteboard in primary school mathematics can effectively improve students' interactive ability. Mathematics is a purely theoretical and logical teaching, so teachers should pay attention to communicate with students in teaching, lest they lose their confidence in mathematics learning because of insufficient understanding of some content. The use of interactive electronic whiteboard under the guidance of teachers can improve the communication between students and teachers, shorten the distance, and lay a good foundation for the establishment of lively math classroom atmosphere. The interactive electronic whiteboard has a pre-set function, which can be written, annotated, played video and audio, searchlight, photo, erase and other technical features at any time, and can be intuitively controlled, which can not only improve students' sense of participation and cooperation, but also allow students to communicate with teachers, so as to deepen the learning content and improve students' learning enthusiasm. For example, in the Motion of Graphics, using the animation function of the interactive electronic whiteboard, students can intuitively feel the process of motion. When observing the picture, students can describe the movement of the object through action, and then drag the figure according to the motion mode to classify it. At this time, students will show strong interest, further improve the

teaching effect and enhance the interaction. [8]

(3) Cultivate mathematical abstract ability

Abstract ability covers a wide range. In the process of training primary school students' abstract ability, teachers should determine the core elements of mathematical abstraction, organically integrate the form and content of abstraction, and guide students to conduct in-depth research through specific models. In teaching, attention should be paid to cultivating the three abstract abilities of "representation", "principle" and "construction". Teachers can guide students to observe and study carefully through interactive electronic whiteboards, so as to deepen students' understanding of mathematical concepts and rules, explore their abstract meanings, and learn them abstractly, so as to discover some mathematical laws and problem-solving methods. In the Understanding of Polygons, teachers can divide the abstract concepts into sections and connect the mathematical geometric characteristics represented by each word, so as to cultivate students' abstract ability. For example, teachers can use the interactive electronic whiteboard to demonstrate a video in which lines are connected according to rules to form a closed graph. By designing multiple connections, various graphs composed of line segments are finally presented on the interactive electronic whiteboard, so that abstract concepts can be presented to students in a more intuitive way.[9]

(4) Review and deepen the impression

The interactive electronic whiteboard has a powerful function, which can promote the innovation and improvement of the subject and adapt to the educational needs of the new era when it is used in the primary school mathematics teaching. Only by actively trying and innovating in teaching can we better understand students' learning situation. Especially when primary school students are still in a period of continuous development, teachers often appear in the mathematics teaching, students' minds are blank and it is difficult to understand the key knowledge. Therefore, in classroom teaching, teachers can use the interactive electronic whiteboard to review what they have learned, so as to improve students' grasp of what they have learned. In addition, combing and reviewing can not only help students organize knowledge, but also help them establish a new knowledge framework and deepen their understanding of knowledge.[10]

5. Concluding Remarks

To sum up, teachers should take the core quality of mathematics as the center and guide students to effectively summarize and explore the knowledge they have learned. In addition, it is necessary to continuously cultivate students'

mathematical thinking, take improving their overall quality as the teaching purpose, conduct in-depth research on teaching activities, adjust and optimize the teaching process, and make the teaching content more fulfilling. At the same time, interactive electronic whiteboard is used to simplify the operating process of class, so that students can better learn in class, so as to improve the teaching effect.

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