The "Four Word Decision" of Improving Quality and Efficiency in Primary School Mathematics **Classroom Teaching**

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Abstract: Dewey, a famous American educator, pointed out that "teaching is not a simple telling. Teaching should be a process experience, an experience, and an understanding." How to make students like to learn, learn and learn mathematical knowledge in mathematics class, form mathematical application ability, and then experience the charm of mathematical thinking, and complete the extension from mathematics class to life is a problem I have been concerned about and thinking about. Through learning and practice, I believe that in mathematics teaching, we should focus on "refinement", "living", "change", and strive for "reality", and read "four word decision" well, so as to promote more effective and efficient mathematics classroom practice activities.

Keywords: Thinking; argue; Experience; Effectiveness; Classroom.

1. INTRODUCTION

2. REFINEMENT - HIGHLIGHT THE KEY POINTS AND REFINE THE CONTENT

40 minutes in class is very short, which often makes us overstretched. How can we use the limited time on the cutting edge? Zhang Qihua, the prince of mathematics, believes that arming students' knowledge learning with rich and meaningful mathematical thinking is an effective way. The cultivation of students' thinking ability needs sufficient time and space. The teacher's classroom language is not necessarily complicated and lengthy, but it should be designed in a concise and clear way. At the same time, it should strive to simplify the content and remove the miscellaneous details. The students' energy is always highly concentrated to ensure that in the limited time of a class, they can attract students' "eyeballs" and catch students' "eyeballs". Through necessary simplification, students can think and effectively complete the classroom practice.

For example, in the lesson "Determining the Position by Number Pairs", I designed to use the position of Zhang Yue to run through the front and back. First, I asked a row of students to stand up and describe the position of Zhang Yue (the third from the bottom, Zhang Yue standing at the sixth, etc.), and then I asked them to sit down. Now I can still describe the position of Zhang Yue in this way, which conflicts with the old knowledge. At this time, two numbers are needed, and the left and right sides should be emphasized, and the unified rules should be followed, Describe the position of Zhang Yue with the new method (row 6 of column 3): find out the position of Zhang Yue on the plan and record the position of Zhang Yue; Can it be more concise? It caused the students to create the prototype of number pairs, and finally expressed the position of Zhang Yue with number pairs (3,6). With the same material and sharp contrast, in the process of constantly standardizing and simplifying the expression of this position, create mathematical knowledge, learn mathematical thinking, and experience the simplicity and preciseness of mathematics.

Professor Zheng Shumin said that mathematics does not seek perfection, but requires unity. Let students have a deep understanding, and then achieve "familiarity to use" and "drawing inferences from one instance", which is the effect we are pursuing. I think classroom teaching should not be comprehensive, but should be point to area. Although it is not comprehensive enough, but long-term training accumulation, students can learn methods from it and realize the internal essence, which is the kind of comprehensive classroom can not be crossed.

3. CHANGES ---- TEACHER-STUDENT INTERACTION, FORM CHANGE

Classroom is life, life needs true love; Class is communication, which needs sincerity; Class is life, life needs reality; It is more necessary to cooperate with each other. Effective cooperative learning can awaken students' sleeping potential, activate sealed memory and open the mind of claustrophobia. In such a classroom, teachers and students are fully engaged. While teaching and learning, teachers and students feel the surging and growth of life in the classroom. Only in such a classroom can students obtain all-round development, and teachers' labor will show the brilliance of creation and charm of personality.

To improve the effectiveness of teaching, teachers should seek to establish an effective two-way. Or multi-directional teaching interaction between teachers and students, and teaching interaction between teachers and students. However, I think what teachers should do is how to make all kinds of interactive ways work effectively and promote the efficiency of classroom teaching. Classroom teaching should correctly handle the interaction between teachers' teaching and students' learning, and let the interaction between teaching and learning get harmonious resonance, so as to achieve the best teaching effect. For example,

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in order to let students establish a space concept of 1 square meter, I designed the following teaching links:

Teacher: A square with a side length of 1 meter and an area of 1 square meter. Cash

Please close your eyes and think about the size of 1 square meter

Draw 1 square meter on the board) Later, compare the size of 1 square meter you think with that of the teacher

Compare the size of 1 square meter. I drew a square meter in the upper right corner of the blackboard.

Teacher: OK, open your smart eyes and find out where is 1 square meter? Student: They raised their hands, waved with their hands, and shouted: I know, I know

Avenue.....

Teacher: Who would like to point up and say.

Student 1: (happily points to the two adjacent sides of the square) Here. S2: No, that's 1 meter.

Sheng 1: A square with a side length of 1 meter is 1 square meter.

Sheng 2: Then you mean the length of the side. One square meter refers to the size of a square whose side length is one meter, not the length of the side

At this time, the whole class nodded their approval.

In practice, we can clearly see that the difference between 1 square meter and 1 meter is made clear by the students with the help of the square drawn by the teacher during the debate. Instead of being clearly explained by the teacher, the focus of teaching is really on guiding students' "learning", achieving the harmonious resonance between teaching and learning, and receiving the effect of "teaching is for not teaching".

4. LIVE -- EXTRACT MATERIALS AND LIVE BY METHODS

The junior students are young, and their cognitive ability is relatively weak. The learning effect is closely related to the external learning situation. A good learning situation should be closely related to the students' existing life experience and knowledge background, and will cause students' cognitive conflict, which is conducive to students' active participation in mathematics activities. "Learning mathematics by connecting with life" is a significant feature of the new textbook. Therefore, I will focus on combining students' existing life experience, selecting people or things familiar with students' life, designing vivid, interesting and intuitive mathematical activities to meet diverse learning needs, so that students can understand mathematical knowledge in vivid and specific situations.

For example, let poker become our curriculum resource. Poker games can improve students' interest in learning, because the attention characteristics of junior students are that unintentional attention is dominant, and intentional attention is not easy to last. We can make use of the unintentional attention of the game to insert poker games into the teaching of calculation, which is conducive to relieving students' fidgety about calculation and cultivating students' good calculation habits. Use in class: such as understanding and dividing numbers within 10, rounding up 10, adding and subtracting numbers within 20 method, comparison of numbers, calculation of 24 points, etc; Use at the end of class: students are more likely to be tired and distracted about 5 minutes after class. At this time, please play cards, compare and count; Extra-curricular use: students complete their homework in the form of self-generated mental arithmetic questions by playing cards. Students will no longer regard homework as a burden, but as a joy. It can be teachers and students, students, parents and students. Poker is an effective classroom resource for junior students to improve their computing ability, and it is also a fire of interest that ignites students' hearts.

5. PRACTICAL - HANDS-ON PRACTICE, REALISTIC EFFECT

Dewey once said, "Let students learn by doing". The process of opening students' hands and letting students operate by hand is essentially the collaborative activities of students' hands, eyes, mouth, brain and other senses. Let students participate in the process of learning activities with multiple senses, and put theory into practice to verify it. This will not only improve students' operation ability and problem-solving ability, but also stimulate students' thinking and imagination most easily by hands-on practice. In teaching activities, teachers should pay close attention to the direct experience of students, let students discover new knowledge, understand new knowledge and master new knowledge in a series of personal experiences, let students like "learn to swim in swimming", "learn mathematics in doing mathematics", and develop thinking ability. "The wisdom of a child lies at his fingertips. Therefore, to create conditions, students should experience mathematics, understand mathematics, consolidate mathematics, and use mathematics in practice.

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For example, in the teaching of "volume calculation of cone", the teacher broke the practice that the teacher did the experiment on the stage and the students observed and drew conclusions on the stage, allowing the students to cooperate in groups and carry out full hands-on operation. For the first time, the teacher asked the group students to fill the cone with water and then pour the water into the cylinder with the same height as its bottom, so that the students could initially feel that "the volume of the cone is one third of the volume of the cylinder with the same height as its bottom"; The second time, the teacher asked the students to carefully pour the water in the column into the cone with the same height as its bottom, until the three times are over, so that the students can feel more

"The volume of a cylinder is three times the volume of a cone with the same height as its base"; The third time, the teacher asked the students to freely choose the learning materials provided to verify the findings just made. As a result, some students have compared and calculated the cone and cylinder with the same base and height that are kneaded by the plasticine into a cuboid, which has been verified; The method of "pouring sand" draws the same conclusion; More students chose cones and columns with unequal base and height to do the "pouring water" experiment, reminding everyone that only cones and columns with equal base and height can have a certain multiple relationship. It can be said that in these "materialization" operations, mathematical knowledge is no longer so abstract and understanding mathematics is no longer so empty. In this way, the teacher designed the mathematics teaching as a visible and tangible physical activity, which easily made students gain a clear understanding and understanding of the concept and calculation method of conical volume, which was originally very abstract knowledge, and the experience gained through hands-on operation is extremely profound.

For example, when teaching "cuboid and cube volume", I first arranged the students to go back and find a way to find the volume of the object. At first, many students were helpless. After some thought, some students put the stone into a full cup of water, and used the crow to drink water to find the volume. Some students used clay to knead the shape of the object, then filled with sand, and poured into the cuboid to find the volume. This kind of teaching allows students' imagination to be brought into full play, gives students a strong sense of satisfaction, and improves their flexibility of thinking, and creativity is gradually cultivated.

6. CONCLUSION

In a word, a practical class should determine the starting point of teaching, highlight the teaching focus, and capture the generation point of the class. The class style should be simple, the foundation should be solid, the teaching capacity should be solid, the students' thinking should be active, and the teaching method should be flexible. So little by little, as long as we learn to accumulate little by little, our class will be more and more effective!

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