How to Cultivate the Students&Apos; Application Consciousness in the Primary School Mathematics Teaching

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Abstract: primary school mathematics is a basic and important subject. With the deepening of modern scientific knowledge, the scope of application of mathematical knowledge in real life continues to expand, and mathematical knowledge almost penetrates into all disciplines and all aspects of people' s life. Therefore, the study of mathematics in primary school can not only stay at the level of mastering knowledge, but also must learn to apply in real life. Therefore, mathematics consciousness is particularly important in mathematics learning. The mathematics curriculum standard requires us to cultivate the students' mathematics application consciousness from childhood. This paper briefly expounds how to cultivate students' mathematics application consciousness in different periods in my teaching, hoping to be helpful to mathematics teachers' education and teaching.

The contemporary students' consciousness of mathematics application should be mainly manifested in: feeling the close relationship between mathematics knowledge and real life, discovering the mathematics information in life, and being able to use mathematics knowledge to solve the practical problems in life; being able to actively find the realistic background and explore its application value in the face of new mathematics knowledge. So how can we cultivate the students' application consciousness of mathematics?

First, feel the practicality of mathematics from real life and enlighten the application consciousness of mathematics. (Grade 1-3 of primary school)

In the past teaching, I found that the closer the content of mathematics learning is to the actual situation of students' life, the higher the students' self-acceptance of knowledge. In other words, the classroom mathematics knowledge reflected in daily life can be naturally absorbed and quickly understood by students according to their living habits. Therefore, I think mathematics teaching, especially primary school mathematics teaching, should start from the students' real life, let the students feel that mathematics is everywhere in life, and highlighting mathematics knowledge from daily life is an important condition to cultivate students' mathematics application consciousness. In teaching, teachers should be good at creating a certain situation in line with the students' daily life habits according to the students' actual situation, hiding the application of mathematics in the situation, encouraging and stimulating students to actively explore the mathematics knowledge in life in the classroom, and cultivating students' interest in mathematics exploration, so as to give full play to the main role of students in teaching. With teachers as the leading role, students can feel that mathematics is in our daily life by exploring mathematics knowledge in class.

In the goal of middle school section of mathematics curriculum standard, the goal of problem solving in the first section (Grades 1-3) requires: "to be able to find and put forward simple mathematical problems from daily life under the guidance of teachers, and try to solve them." In view of this problem, I have carried on the effective exploration to the elementary school low stage

mathematics teaching. For example, for the first grade children, if they want to know 1, 2, 3 directly. These numbers seem abstract and hard to understand. However, in my teaching, first of all, I asked students to find things that can be represented by numbers. The children were full of interest and answered a variety of questions. For example, there were four people in my family, one mouth in my class, 30 in our class, and two blackboards in our class. I found that children' s thinking was very broad, not only within five numbers; There are also many unexpected surprises. Next, let the children find the numbers in the theme map, and finally abstract from the physical object to the same number of sticks, and then to the numbers. In this way, the mathematics they feel is real, kind and not strange, and the mathematics they learn is real and valuable. At the same time, it also cultivates students' interest in learning mathematics. For example, when learning the content of the mixed operation of continuous addition and addition and subtraction, the textbook arranges the scene of "riding" that the children are very familiar with. The arrangement of the scene is to let the students feel the mathematics in life, make the mathematics knowledge stand out in the daily life, and let the mathematics serve the life.

For example, after the third grade students know the circumference of the rectangle, I do this: let three or four students in a group, measure the length and width of the rectangle in the classroom, such as the desk, door frame, timetable frame, behavior standard frame, and design how many materials are needed to make these items. It' s better to mark the unit price for each different material, let them calculate what kind of material to choose and what scheme to use, which can be both economical and meet the needs.

"Mathematics curriculum standard" points out that "mathematics teaching should follow the psychological law of students' learning mathematics, emphasize the starting point from students' existing life experience, let students experience the process of abstracting practical problems into mathematical models, and explain and apply them". In mathematics teaching, teachers should start from the students' existing life experience as much as possible, pay attention to activate the students' life experience, and guide students to find mathematical problems in life, which is the most basic premise and condition for students to explore the value of mathematics and cultivate the consciousness of mathematical application. Imagine that if students can't find mathematical problems, they can't solve problems by using the knowledge they have learned well. In this way, the cultivation of students' awareness of mathematical application may become an empty talk.

Second, contact with the reality of life, cultivate and improve the application awareness of students(grade 4-6 in the high section of primary school)

After teachers expand and introduce new knowledge points on the basis of old knowledge points, they should strengthen the introduction of the application of new knowledge points in specific practical life, so that students can independently associate the new mathematics knowledge reflected in real life. And actively learn to think about how to apply the learned mathematical knowledge to real life, and think about the relationship between knowledge and real life. Through multiple exercises and training, students can form the habit of actively exploring the practical application value of new knowledge when learning new knowledge in the classroom.

1 Guide Students to Find Mathematical Problems in their Daily Life.

There are many mathematical problems in daily life. In teaching, we can choose some simple problems to analyze and solve in students' real life. It is very important to cultivate the students' consciousness of mathematics application and mathematics concept from childhood, and it is also helpful for students to further understand what they have learned. Teachers should make full use of students' life experience to design vivid, interesting and intuitive mathematics teaching activities. Relying on students' direct interest in perceptual materials, stimulate students' interest in learning and enhance students' confidence in learning mathematics. Let students understand, experience and understand the application consciousness of mathematics in vivid and specific real situations. For example, when teaching the understanding of RMB, they can use the situation of shopping to import, estimate the money to be spent, and estimate the change

money when settling accounts. As for the understanding of time, students' understanding of time is very vague, so we should first perceive these time periods at noon and night in the morning, and then recognize the specific time, from full time to half time to specific time, step by step in an orderly manner, in order to deepen the understanding of specific things for each time period, such as starting classes at 8:00 in the morning, having lunch at 12:00 in the noon, and broadcasting news links at 7:00 in the evening. Broadcast and so on. Feel mathematics, know mathematics and learn mathematics in life, and make students realize that mathematics is everywhere in life.

2 Guide the Students to Find the Mathematical Problems in Life from the Teaching Materials.

The new curriculum attaches great importance to the connection between the teaching content and the reality of life. Teachers should fully guide students to feel the mathematics problems contained in the teaching materials, guide them to discover the mathematics knowledge and skills, feel the value of mathematics, and cultivate students' awareness of applying mathematics. In the second section of the curriculum standard (grade 4-6), the goal of problem solving is: try to find and put forward simple mathematical problems from daily life, and use some knowledge to solve them. For example, in the teaching of triangle stability in the second volume of mathematics in the fourth grade, I prepared a lot of splicing learning tools for the students, so that the students can feel the stability of the triangle in the hands-on operation, the parallelogram is easy to deform, and the pentagons and hexagons have the nature of deformation, so this stability is the characteristic of the triangle, and then find the examples of applying this characteristic in life. And feel the application value of mathematics in real life. Another example is the bar chart part of unit 7 in the first volume of mathematics of grade 4, which counts the birth month of the students in this class. First, complete the statistical table, and then complete the statistical chart, which not only greatly stimulates the enthusiasm of the students in mind, makes the students feel the mathematics around them, but also cultivates the ability of data sorting, induction and analysis. Another example is the cycle length of the teaching circle in the first volume of grade 6, which enables the students to cooperate in the process of exploring the cycle rate. The exploration of this process makes the students feel that the mathematical knowledge comes from life, which is obtained by the ancestors after a long time of continuous exploration. Now we should experience the experience of the predecessors, and at the same time, we should apply their achievements to the actual life. This is also my opinion on. Another understanding of mathematics applied consciousness.

Third, according to mathematics knowledge to solve practical problems in life, experience the application value of mathematics knowledge.

"If students are to be fully engaged in learning activities, they must face their own meaningful or related problems," Rogers said. But our education is trying to isolate students from all the realities of life, which constitutes an obstacle to learning in absolute sense. However, if we want students to be free and responsible individuals, we have to let them face all kinds of practical problems directly. ""In the curriculum standard" puts forward: "initially learn to find and put forward problems from the perspective of mathematics, comprehensively use mathematical knowledge to solve simple practical problems, enhance the awareness of application, and improve the practical ability." For example, when teaching the surface area of the long cube in the second volume of mathematics in the fifth grade, use the area formula to solve the actual problem, calculate the number of glass required for a fish tank, that is, to find the area of the fish tank, and the number of metal bars is to find the circumference of the fish tank, but it can' t set the formula, but change and choose according to the actual situation, and then infer to find the area of the drawer. This kind of teaching is not only beneficial to the students' understanding of this part, but also lays a practical foundation for the surface area of learning cylinder in grade six. Another example: the teaching of discount in the first volume of mathematics in grade six is not new to students, but when it comes to the specific meaning and calculation, students are at a loss, so I arranged an assignment for each student to investigate a parent' s item, three data: original price, current price and discount. In class, I will start with the students studying the relationship between the three, feeling the significance of discount, and experiencing the original price, current price and the solution of discount. According to this teaching

method, in the aspects of cultivating students' problem consciousness and application consciousness, deepening students' feeling of mathematics application value can not only help students accumulate life experience, but also improve students' ability to solve practical problems.

Primary school mathematics learning is the initial stage of students' mathematics career, so primary school mathematics is the most basic and important. As a primary school mathematics teacher, we should not only lay a good foundation for students' mathematics, but also arouse students' interest and love for mathematics learning according to the actual mathematics problems in daily life. How to help students to set up correct mathematical concepts, stimulate students' long-term interest in mathematics learning and establish correct consciousness of mathematics application in the initial stage of primary school learning is just a few of my superficial knowledge. I will continue to explore and research in the future education and teaching.

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