

# The Application of Conversion Thought in Primary School Mathematics Teaching

Fulin Teng

Hunan University of Science and Technology, Xiangtan, Hunan 411201

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**Abstract:** As a primary school mathematics learning process of an important thought, applied to the primary school mathematics in the field of many learning plates, students understand and master mathematical knowledge plays a decisive role. Teachers properly applying the idea of transforming in maths teaching can help students better understand math concepts and clear mathematical theory, the essence of knowledge, solve mathematical problems, simplifying the mathematical calculation, thus further deepen students' understanding of knowledge, broaden the students' mathematical thinking, mathematics classroom efficiency, optimization of mathematics classroom teaching process.

**Keywords:** The thought of transformation; Primary school mathematics; Mathematics teaching

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## 1. Understand mathematical concepts by using reductive thoughts

Mathematics concept is an important part of primary school mathematics learning, students only have a more profound understanding of the concept in the subsequent process of mathematics learning to achieve the state of ease of application. Mathematical concepts are relatively abstract for students in the process of development, and their memory tends to be intuitive and graphic, which requires teachers to adopt certain ways to assist students in memorizing. Considering the characteristics of students' memory, concept teaching needs to be designed to be more intuitive. Taking the first volume of the third grade mathematics textbook of human Education Edition "Preliminary Understanding of fractions" as an example, let it combine with the reality of life, and make unfamiliar knowledge more familiar.

## 2. Use the idea of transformation to clarify mathematical calculus

Student accounting theory plays an important role in students' correct calculation. Without a good grasp of arithmetic, mathematics is simply a copy and paste of simple experience, or a mechanical imitation. Only when students understand and master arithmetic, can their memory of knowledge not only stay on the surface, can they truly understand and master knowledge, and can they flexibly apply it to practice. However, the teaching of mathematical arithmetic has always been the focus and difficulty of mathematics class. In order to solve this problem, teachers need to think carefully. Taking the teaching of "addition and subtraction of different denominator fraction" in the second volume of the fifth grade mathematics textbook of human education Edition as an example, this paper uses the thought of transformation to guide students to establish the connection between new and old knowledge quickly and help students to clarify the arithmetic of addition and subtraction of different denominator fraction.

Constructivism learning theory emphasizes that students do not enter the classroom empty-head, and they have formed rich experience in previous learning, so teaching cannot ignore students' experience. In learning this class, students have learned the addition and subtraction of the same denominator fraction, and have preliminarily understood and mastered the arithmetic of the addition and subtraction of the same denominator fraction, so it is easier to understand and master the arithmetic of the addition and subtraction of different denominator fraction. In addition, students have learned the general division and simplification of fractions before, which is also taught on the basis of the contents of the least common multiple and the greatest common factor. Teachers should remind students of the old knowledge before teaching a new lesson, and then help to make connections between the old and new knowledge. After the teacher teaches the student the general score, gives full play to the student's subjective initiative, can let the student according to the calculation process of the same denominator fraction addition, subtraction completes the calculation of the

different denominator fraction addition, subtraction. It seems that the calculation of addition and subtraction of different denominator fraction is a new learning content, which is actually taught on the basis of students' existing experience<sup>[1]</sup>.

### **3. Apply the idea of transformation to master the essence of knowledge**

For students in the middle and lower grades of primary school, mathematics knowledge as a whole is still abstract. They are given priority to concrete image thinking, and are still in a state of half-understanding the mathematical symbols and mathematical meanings expressed in mathematics. To teach these abstract and obscure contents to students, it is necessary for teachers to have a thorough understanding of the textbook, make full preparation for lessons, understand the students' learning status, and then lead students to understand the essence of mathematical knowledge. After students understand the essence of mathematical knowledge, no matter what kind of changes, they can basically achieve the purpose of solving problems quickly. In the future similar mathematics learning situation can be invariable should change, directly hit the essence of the problem. Taking the second volume of the fifth grade mathematics textbook "The meaning of fractions" as an example, this paper gradually grasps the essence of mathematics content and improves the depth of students' thinking.

### **4. Skillfully use the idea of transformation to solve mathematical problems**

In a part of primary school math exercises, some exercises seem very complicated, but in fact, after subdividing them, it is not as difficult as it seems. Teachers can guide students to convert these complex exercises into known experience, and then break them one by one, so as to simplify them into easy problems for students to solve. Complex problems are actually simple problems piled up, as long as the master of simple problems, grasp the basic knowledge firmly, and then master the problem solving skills, complex problems will be solved in the end. Elementary school complex plane figure is generally for the area or perimeter, which requires the students not only to master basic shapes, such as: such as rectangle, square, triangle formula of area and perimeter to students after the graphics can lacerate or complement them into basic shapes, and then calculate the perimeter of complex graphics or area.

### **5. The idea of adaptation simplifies mathematical calculation**

Mathematical calculation is one of the important contents of mathematical knowledge. Mathematical calculation ability is a basic mathematical ability that primary school students need to master. Mathematical calculation ability is an important basis for learning mathematics and other subjects. Calculation teaching occupies a large proportion in primary school mathematics teaching materials, and the level of students' calculation ability directly affects the quality of students' learning. Therefore, training students' computing ability is the most important part of mathematics teaching.

### **6. Conclusion**

Proper use of the thought of transformation can not only deepen the understanding and consolidation of old knowledge to a certain extent, but also naturally transition to new knowledge. The ultimate purpose of using the idea of transformation is to let students quickly master mathematical knowledge in the shortest time, so as to better solve mathematical problems and improve the efficiency of learning mathematics. Of course, to master mathematical knowledge, solve mathematical problems and broaden mathematical thinking is not only the use of conversion thought, but also combined with other ideas, concepts, methods and so on, so as to achieve a better state of teaching.

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