

Analysis on improving the effectiveness of mathematics classroom teaching in primary schools under the background of the new curriculum standard

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Abstract: In recent years, China's education has made considerable development and progress. The new curriculum reform requires education to face modernization, which requires teachers to do a good job in teaching reform. The goal of the new curriculum needs to reflect the development requirements of the times, and is committed to training comprehensive talents. Under the background of the new curriculum reform, primary school mathematics has achieved a comprehensive reform. The education concept has gradually changed to focus on the development of students and the development direction of teachers. The teaching mode and teaching methods have been adjusted, focusing on the cultivation of students' observation ability and analysis ability. Based on this, the article makes a concrete analysis and discussion on how to improve the effectiveness of mathematics classroom teaching in primary schools under the background of the new curriculum standard.

Keywords: new curriculum standard; Primary mathematics; Curriculum reform

Introduction

In the context of the normalized development of China's economy and society, the economic level has improved significantly, and the relationship between the network and information has become closer and closer. In this case, education has also achieved a comprehensive reform. Mathematics subject in primary school is the key and difficult point in primary school curriculum teaching. Under the background of curriculum reform, mathematics teachers need to carry out teaching reform, break through the traditional teaching mode, and do a good job in systematic teaching integration. Primary school mathematics teachers need to do a good job in teaching optimization, change the traditional teaching scheme, cultivate the development of students' comprehensive quality and ability, and cultivate students' ability to solve problems.

1. Characteristics of Mathematics Teaching in Primary Schools

Primary school mathematics is to teach students to learn to know numbers, four operations, graphic geometry and other knowledge contents through the knowledge points of the textbook. Teachers need to help students lay a solid foundation for mathematics learning, let students establish a systematic knowledge structure based on their knowledge, integrate the fragmented knowledge points, and form a systematic structural system. In teaching activities, teachers need to convert abstract teaching cases into concrete examples of students' lives, guide students to improve their enthusiasm for mathematics learning, and promote the development of their comprehensive quality. Among them, the main characteristics of primary school mathematics discipline are as follows:

First of all, the primary school mathematics discipline has a certain degree of logic and abstraction. The primary school mathematics discipline has a high degree of knowledge difficulty. The mathematics discipline has a strict logic, and the mathematical knowledge points are relatively abstract. Students will have difficulties in learning in the process of learning; Secondly, mathematics can not be separated from teachers' education and guidance. The essence of mathematics teaching is a kind of thinking activity. During knowledge learning, teachers should guide students to establish systematic problem-solving thinking, guide students to grasp the development direction of mathematical thinking, and let students know how to think in the learning process, so as to complete the task of learning activities; Finally, teachers should inspire students to strengthen reflection and understanding of knowledge, and promote students' knowledge learning and development.

2. The Necessity of Classroom Teaching Reform of Primary School Mathematics under the Background of New Curriculum Standards

2.1 Stimulate students' learning motivation

The monotonous classroom teaching situation and single teaching method will affect students' learning and make it difficult to improve students' learning motivation. In this regard, teachers should design and arrange relevant teaching activities in combination with the teaching content, encourage students to participate in learning activities, stimulate students' learning motivation, conduct learning in interesting and exploratory teaching situations, guide students to strengthen their understanding of the core points of knowledge. In innovative teaching activities, both teachers and students need to build interactive activities, teachers should do a good job in education guidance, and set up scientific and reasonable interactive topics, Help students learn math knowledge.

2.2 Innovative students' thinking development

The key factor to improve teaching efficiency is to adjust and change teaching methods and concepts. Mathematics teaching is the interaction between teachers and students and between learning, which is a process of coordinated development. Only by doing a good job in the reform of learning methods, building an interactive learning model, encouraging students to transform their learning experience into basic abilities, can we achieve the comprehensive and coordinated development of individuals and the environment, and build a comprehensive teaching activity. Creative teaching can be reflected on multiple levels, and does not involve single knowledge point teaching. Teachers should do a good job of education guidance, encourage students to participate in active exploration activities, think in problem solving, and explore basic learning rules. Teachers should guide students to strengthen their understanding of knowledge, form a core method to solve problems, enable students to learn in the process of observation, experiment, exploration and verification, and innovate the development of students' thinking ability.

2.3 Improve modern teaching

In the new era, modern technical equipment and products emerge in endlessly. In the age of big data, we can realize the social demand for talent development. Under the current background of the times, schools have the responsibility of subject teaching, as well as the responsibility of cultivating students' moral quality. We can also recognize the social demand for all-round talent development. At present, the teaching methods commonly used by many primary school teachers can no longer meet the students' learning development. If traditional teaching methods such as topic sea tactics and rote learning cannot guide students to complete efficient learning, it may burden students' learning. In addition, some teachers will analyze the problem solving mode of word problems, so that students can remember the routine of problem solving. Although this kind of teaching helps students to strengthen their understanding of knowledge points, if this teaching mode is applied for a long time, students' thinking will be limited. In this regard, teachers need to pay attention to the use of modern teaching methods, change the traditional teaching concepts, adjust the previous teaching concepts, in order to improve the quality of modern teaching and enhance teaching efficiency.

3. The current situation of mathematics teaching in primary schools under the background of the new curriculum standard

Under the educational background of the new curriculum standard, primary school teachers need to pay attention to the optimization and reform of classroom teaching, so as to make the curriculum reform develop in a modern and scientific direction. From the perspective of primary school mathematics teaching, the reform of primary school mathematics teaching is developing towards the direction of the new curriculum standard. However, in the context of the implementation of the current new curriculum reform, the primary school classroom teaching model has not been improved, and the primary school mathematics teaching model has not made breakthrough progress. The primary school mathematics teaching mode is still too old at this stage, which is still based on the basic narrative teaching. The teachers' ideas about primary school mathematics teaching and the application of the new mode are not in place. The new curriculum teaching reform has not met the requirements of the curriculum standard idea, and the teachers' teaching methods do not meet the students' learning needs. At this stage, students have great differences in learning and development. If "one size fits all" teaching is adopted in teaching, it will not meet the quality and ability development of students. At the same time, the way of mathematics teaching in primary schools is relatively single, the theory and practice are not fully combined, the teaching content is relatively complex and abstract, and primary school teaching does not promote students' learning motivation.

Based on the analysis of the current situation of primary school mathematics teaching, if primary school mathematics teaching is to fully meet the requirements of curriculum reform, it needs to make various adjustments and adopt teaching reform, so as to achieve the expected goal of the new curriculum reform.

4. Analysis on improving the effectiveness of mathematics teaching in primary schools under the background of new curriculum

Under the teaching background of the new curriculum reform, mathematics curriculum in primary schools also needs to be reformed. Mathematics subject in primary school is the key and difficult point in primary school curriculum teaching. Under the background of curriculum reform, mathematics teachers should also innovate teaching, break through the traditional teaching mode, and do a good job in systematic teaching integration. Primary school mathematics teachers need to do a good job in teaching optimization, change the traditional teaching scheme, cultivate the development of students' comprehensive quality and ability, and cultivate students' ability to solve problems.

4.1 Stimulate students' learning motivation and improve teaching efficiency

Mathematics is relatively boring for students. If students have learning obstacles in the whole learning process, it may lead to the rupture of the mathematical knowledge chain. In addition, if students have problems during the problem solving period, and there are more wrong questions than questions, their learning confidence will be hit, their learning enthusiasm will be reduced, and their interest in learning

will be gradually weakened. In order to avoid this situation, teachers need to do a good job in teaching reform. On the one hand, teachers can appropriately lower the teaching requirements for students with poor mathematical learning foundation, and give them regular help and encouragement. On the other hand, for students with good mathematical foundation, teachers can set up another gradient of teaching content for them, so that they can build learning confidence in the process of learning. For example, primary school mathematics teachers can do some rich mathematical extracurricular activities with students after class, explain the story experience of mathematicians to students, set up simple mathematical competitions, and complete some interesting mathematical models, which will help students get fun in learning and stimulate their learning motivation.

For example, in the teaching of Shandong Qingdao version of Mathematics, in order to stimulate students' learning motivation and break through the key and difficult points in teaching, teachers use micro classes to carry out teaching, so that students can form a basic concept of Interesting animal stories - knowledge of gram, kilogram and tonweight. First of all, in order to explain the knowledge of "gram", teachers can record videos in advance, introduce a group of experiments in the videos, weigh chewing gum, coins, peanuts and cotton under the weight of one gram, and guide students to build their understanding of the concept of "gram". After the teaching, the teacher asked students to estimate the weight of the prepared items, and then asked students to weigh the items themselves to verify the weight of the items. In this teaching process, teachers can guide students to understand the concept of weight by connecting with their own actual situation. Among them, teachers can also set up hierarchical tasks to let students with strong mathematical learning foundation complete practical activities and estimate the weight of objects in life; Let the students with weak mathematical foundation complete the task of reading the map, and guide them to write down the weight of the objects in the picture.

4.2 Create a strong learning atmosphere and enhance independent ability

A strong learning atmosphere is a necessary condition for students to actively participate in learning activities. In this regard, teachers should attach importance to the construction of class culture, create a strong learning atmosphere for students, guide students to improve their learning initiative, and promote the development of students' comprehensive quality. Teachers can set up a learning garden module on the wall of the classroom, write original questions and self selected questions in the learning garden, and select classic mathematical examples that teachers have studied in recent years to create a strong learning atmosphere for students. Among them, teachers need to encourage students to participate in the reading of mathematical magazines, so as to encourage students to analyze their learning experience, mathematical problem-solving experience, and classic examples, encourage students to read these magazines, broaden their learning horizons, and stimulate their learning enthusiasm. In learning activities, students should learn independently, participate in learning and training, and make progress through training. Teachers need to create a good learning atmosphere, encourage students to participate in it, and create a good learning environment.

For example, in the teaching of Mathematics in Qingdao, Shandong, teachers create a good learning atmosphere to guide students to complete autonomous learning. Picking section - mixed operation First of all, the teacher used multimedia projection to present a picture related to the "picking festival", which involves a picture of a family of three going to the picking garden to pick, and a picture of a class of students going to the picking garden by bus. Then, the teacher set the question: What pictures do you see when observing the pictures? By analyzing the pictures, what questions can we learn from the dialogues of the characters? How many people are involved in the picture and how many baskets are needed? Secondly, in teaching activities, teachers should guide students to learn the order of mixed operation, understand the main calculation order of mixed operation, and completely state the specific information and problems.

4.3 Cultivate students' reasoning ability and broaden their learning horizon

As we all know, mathematics is a subject with relatively abstract content, a wide range of comprehensiveness, and high requirements for logical thinking ability. If teachers want to guide students to learn this course well, they need to let students do a good job in teaching reform and promote students to form key core qualities. The students' learning originates from thinking and thinking starts from doubt, and their imagination is very rich. In this regard, teachers need to combine the characteristics of students to cultivate students' ability to guess and verify, so as to innovate learning activities. Teachers need to use students' learning nature in teaching activities to cultivate students' questioning spirit, guide students to guess boldly, verify the core of the problem, and guide students to broaden their own learning horizons.

For example, in the teaching of Shandong Qingdao version of Mathematics, in order to cultivate students' reasoning ability, teachers set up teaching activities. Green ecological park - solving problems Among them, "problem solving" involves application exercises. Teachers should cultivate students' reasoning ability, broaden their learning horizons, and help students develop their imagination. Among them, teachers should guide students to analyze the key points of problems, let students think about the structure of each layer of problems, truly broaden students' learning vision, mobilize students' learning interest, and promote the development of students' comprehensive ability.

4.4 Students form good habits and improve learning efficiency

Good learning habits are the key to mathematics learning. In primary school, teachers should cultivate students to form good mathematical habits. The students at the primary school stage have strong ambition, and their imitation ability is also relatively strong.

Teachers need to teach by words and deeds in daily teaching, encourage students to form good learning habits, standardize students' writing, and let students ensure that the paper is clear in the process of solving problems, so as to reduce the probability of students making mistakes. In addition, in daily teaching activities, teachers should encourage students to develop good habits. In addition, teachers also pay attention to training students to form independent thinking ability, actively think in class, and let students complete communication and interaction in class, so as to promote students' logical reasoning ability and cultivate their intellectual development. In addition, teachers should also cultivate students' innovative thinking ability, guide students to develop good habits in learning activities, so as to improve their academic performance.

For example, in the teaching of Mathematics in Qingdao, Shandong, teachers should guide students to form good learning habits, cultivate students to write in a standardized way during the learning process, and clearly understand how to mark Knowledge in Home -- A Preliminary Understanding of Decimals the decimal point, so as to avoid mistakes. Among them, the small round point is the decimal point, which is also an important symbol of decimals. The decimal point divides the decimals into left and right parts. The left side of the decimal point is the rest integer part, and the right side is the decimal part. Decimal is composed of integer part, decimal point and decimal part.

4.5 Improve flexible application ability and participate in practice independently

In every aspect of students' daily life, there is rich mathematical knowledge. From astronomy and geography to household daily expenses, mathematical calculations are needed. The application of mathematical knowledge is also indispensable to the construction, commercial operation and mechanical production in industrial plants in cities. In the teaching of mathematics, teachers need to effectively infiltrate the key points of mathematical knowledge, combine knowledge with students' actual life, encourage students to learn and use knowledge, guide students to learn through practical inquiry, let students understand the true meaning of mathematical knowledge, encourage students to actively participate in mathematical learning activities, and flexibly use knowledge.

For example, in the teaching of Mathematics in Qingdao, Shandong, teachers should cultivate students' ability to use flexibly, set up creative cooperative learning tasks, and let students participate in practical activities to complete creative drawing. A lively folk festival - symmetry Among them, teachers should cultivate students' flexible application ability, let students draw pictures according to the axis of symmetry, so as to promote the development of individual thinking ability.

5. Conclusion

To sum up, in the context of the implementation of the new curriculum standards, teaching reform has become a key trend, and improving the effectiveness of mathematics classroom teaching in primary schools has become the key point of teaching reform. In this regard, teachers need to prepare lessons carefully, strengthen interaction with students in classroom teaching, and stimulate students' learning motivation. Among them, teachers should analyze the actual situation of students, understand the students' learning situation, do a good job in teaching design, and scientifically formulate teaching objectives, which will help improve the effectiveness of teaching.

References:

- [1] Xiang Xiuzhi. Analysis on Improving the Effectiveness of Mathematics Classroom Teaching in Primary Schools in the Context of the New Curriculum Standard [J]. China Youth, 2018 (03): 163
- [2] Cai Shuliu. Research on the Countermeasures to Improve the Effectiveness of Mathematics Classroom Teaching in Primary Schools [J]. Examination Weekly, 2021 (61): 40-42