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Research on the Integration of Analysis and Algebra Knowledge in Basic Mathematics Teaching

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Abstract: Education is one of the key issues that the country pays close attention to at the present stage. Strengthening the attention to education can not only effectively promote the level of national cultural knowledge, but also effectively promote the national economic development and provide certain support for national construction in this process. Therefore, China's current education and teaching system is constantly undergoing reform,It is required that teachers should make more changes in teaching methods according to the national development situation and the requirements of teaching reform, so as to promote the improvement of students' knowledge and learning efficiency. Especially for mathematics, which is a relatively high abstract knowledge, teachers should fully integrate basic mathematics teaching with algebra knowledge in the teaching process,To effectively improve students' mathematical thinking, this paper will introduce and study the specific implementation methods in the process of mathematics teaching.

Keywords: Mathematics subject;Basic teaching;Knowledge of algebra;Fusion research

At present, China is in the process of continuous development. Therefore, the country's demand for and attention to talents are also increasing significantly. Moreover, in the stage of social progress, the competition between countries is summed up as the competition among talents. Only when the country has a large number of scientific and technological talents, can it effectively promote the progress of national science and technology,To provide greater help for national economic development, therefore, the education industry is highly concerned by the state [1].

1 The significance of integrating basic mathematics teaching with algebra

For the subject of mathematics, because of its relatively difficult knowledge and relatively high abstraction, it is necessary for teachers to lead students to complete more exploration of mathematical knowledge with the help of the introductory course of basic mathematics in the process of mathematics teaching, so that students can explore more profound mathematical content based on the narrow sense of mathematical knowledge.For algebra, geometry, calculus and other related knowledge, they are all important parts of basic mathematics.[2] In the process of learning algebra, it is mainly a game between numbers, which is to study the basic calculation principles and methods of numbers. In a word, algebra is a branch of mathematics, in the process of Mathematics Teaching,School mathematics classes are from the enlightenment stage to carry out teaching for students, to promote the increase of students' basic mathematical knowledge [3].For example, teachers in the classroom for students to carry out mathematical knowledge concept, the most basic addition operation, subtraction operation transition to multiplication and division operation process, and even fraction calculation and decimal calculation are constantly guide students to learn between numbers, promote the gradual development of students' mathematical thinking, and in the teaching process,What's more important is to guide students to better discover the basic operation rules between numbers.With the continuous progress of education and teaching and the increase of students' cognitive level and knowledge, teachers also need to continuously improve the teaching difficulty in this process. Through more profound knowledge teaching, students' interest in this period can be promoted, at the same time, they can develop a good mode of thinking and have a better ability to analyze and understand mathematical knowledge.

1.1 The combination of mathematics basic knowledge and algebra is better in line with the law of mathematical development

With the development of mathematics teaching in China for many years, it has been fully recognized that the integration education between mathematics is a major development trend of teaching at this stage. Therefore, in the current school development process, some schools have begun to explore the education of comprehensive subjects, taking the overall development of students as the education and teaching goal at this stage,The teaching of mathematics subject knowledge should be better in line with the development trend of education reform. In the education and teaching work, we should strive to achieve the goal of integration.

1.2 The integration of the two promotes the improvement of students' learning ability

Due to the abstractness of mathematical knowledge, the difficulty is relatively high. Therefore, students' learning ability is a key content that affects students' learning level of mathematical knowledge. In the process of mathematics teaching,

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teachers need to fully understand students' learning ability, and carry out basic teaching according to students' learning situation,Students' learning ability is the ability to use formulas to deal with related problems. In this process, the cultivation of basic ability is to fully tap students' mathematical thinking, so that students can more independently find existing problems and solve them effectively in the process of mathematics learning [6].

2 Research on the method of basic mathematics knowledge and algebra knowledge fusion

To sum up, the integration of basic mathematical knowledge and algebra knowledge has become a major direction in the current stage, and also has a profound impact on the teaching of mathematical knowledge. However, in the actual teaching process, the integration of basic mathematical knowledge and algebra knowledge is not a simple integration of two classes,It is not only a simple change from two teachers to one teacher, but also a change of traditional teaching ideas, the integration of new teaching methods and teaching concepts. It is enough to see that the integration of basic mathematics teaching and algebra knowledge has certain difficulties. Teachers should continue to study teaching methods in this process,Explore new forms of teaching, and constantly solve a series of difficulties in the teaching process.For example, what is the integrated teaching mode?How to select the integrated teaching content?How to promote the further teaching of integrated knowledge?A series of problems are the key contents that affect the smooth progress of teaching. These problems need to be deeply discussed and studied by educational researchers and front-line mathematics teachers, and effectively solved together. This paper will also explain and analyze the specific integration ideas, and strive to contribute to the development of education.

2.1 Constantly improve the education and teaching system

In the process of mathematics teaching, teachers first need to realize the important role of students, fully realize that students are the main body of the classroom, and also the main participants of classroom activities. In the process of teaching, teachers only need to guide and organize classroom activities, which can effectively promote the smooth progress of the classroom. Therefore, in the process of effective integration of basic teaching and algebra knowledge,Teachers first need to organize classroom activities and establish a complete set of teaching system, which plays a very important role in this stage. At the same time, they need to ensure that front-line teachers have sufficient knowledge reserves and can effectively classify and sort out mathematical knowledge, so as to make it an independent content in both horizontal and vertical directions,Teachers need to make a comprehensive survey of teaching work, so that they can accurately grasp the knowledge points that may be involved in the teaching process. Moreover, in the actual knowledge explanation process, because teachers act as knowledge guides, they should not explain and analyze every exercise in mathematics, but integrate basic mathematics and algebra knowledge,Better describe the teaching method to the students, let the students through the mastery of the method to complete the problem solving .In the actual process of mathematics teaching, due to the students' knowledge base and cognitive level, learning state and self cognitive level are greatly different, teachers need to fully understand each student, and carry out teaching according to the actual differences of students.

2.2 Teachers set more questions that can be answered by both

Students' mathematical thinking is the key content that affects students' mathematics learning, and once students form their inherent thinking, it is more difficult to change, which leads to the deviation of students' mathematical knowledge. Therefore, in the process of mathematics teaching, teachers can fully and consciously set some exercises that must be applied to the knowledge of mathematical algebra and basic knowledge,In the process of students' answers, teachers should give students enough time to study and think about the problems, and can also carry out the form of group, so that students can collectively explore and find solutions to the problems, which can effectively promote the enhancement of students' self exploration ability,It can also promote the integration of basic mathematics knowledge and algebra knowledge more effectively, and it will be of great help to cultivate students' integration ability and thinking ability.

Conclusion:

Mathematics is a basic content for engineering subjects, and the study of physics, medicine and other aspects is inseparable from mathematical knowledge. Therefore, in the process of mathematics teaching at this stage, teachers should constantly change their own teaching methods by organically integrating basic mathematical knowledge with algebraic knowledge,Promote students' thinking ability to be continuously improved.

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