NON-TRADITIONAL METHODS OF SOLVING PRACTICAL PROBLEMS IN MATHEMATICS CLASSES

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Annotation: *This article provides insights into the importance of non-traditional methods in the activities of students using innovative technologies in integrated education in mathematics classes, as well as its pedagogical and psychological features.*
Keywords: *integration, innovation, technology, mathematics, non-traditional methods, practical problems, visual aids, innovative thinking.*

Introduction: In current textbooks, these methods are shown in the conditions of some problems to solve the problem in different ways. Therefore, primary school teachers often do not pay attention to solving other problems in different ways. However, carrying out such work systematically increases students' interest in mathematics. When such situations are studied in schools, teachers find that it takes a lot of time to solve problems in different ways, and it is difficult to ensure the participation of all students. In fact, it takes a lot of time at first. But after a certain period of time, the students themselves try to solve the problem in different ways and do it seriously.

When practical problems are solved in a traditional way, teachers prefer to use the simple arithmetic method first. In this case, the problems are solved by one or two arithmetic methods. In order to more thoroughly implement the process of working on the problems, it is possible to use modern pedagogical technologies, as well as various non-traditional methods, demonstrative and practical methods.

By referring to the practical problems given in the 1st-2nd grade mathematics textbook, we will analyze the methods of their implementation using shapes and drawings.

Issue 1.

Nargiza's mother brought 8 cells, 3 one-lined notebooks. How many notebooks did Nargiza's mother bring in total?

Based on the condition of the problem, appropriate drawings are drawn on the class board. Pupils see these pictures on the board and solve the problem with understanding. The sum of the number of notebooks in 2 groups is brought to the form of one total sum.

Solution: 8+3=11

Answer: 11 notebooks.

Even a low mastering student who knows how to count simply can count the notebooks in the picture one after the other, find their total amount and determine the solution to the problem.

Issue 2.

9 footballs and 6 basketballs were bought for the sports club. How many balls were bought in total for the club?

View of issue-specific drawing:

As a result of drawing a picture of these, he learns that the appearance of the balls is round and similar to the geometric shape of a circle. Children's acquisition of geometric knowledge is also achieved. The role of pictures and drawings in primary education is to develop students' abstract thinking. In addition, the use of pictures and drawings activates students, arouses their attention and attention, and allows them to master the studied material more thoroughly.

Solution: 9+6=15

Answer: 15 balls.

In order for the use of pictures and drawings to be effective, first of all, it is necessary to think about the choice of pictures and drawings that will be used when considering one or another issue of the theory. It is important that only teachers who observing how students perceive a generalizing problem, can determine how many students need additional reinforcement of the conclusion and determine the number of visual aids should always show different instructional guides to the whole class or to individual students. At the same time, excessive use of pictures and drawings can passivize students and negatively affect the development of their thinking.

It is very important to adequately provide mathematics lessons with various visual aids. At this point, it is always necessary to remember the rule expressed by psychologists: correct generalizations in students are a necessary condition for the formation of content, which consists in diversifying the characteristics of the educational material without changing it.

The following is achieved through the 3-step method of solving practical problems:

1) When students are taught to divide practical issues into groups such as issues related to agriculture, trade, savings, they will have an understanding that each issue is related to human practical activity and life process.

2) Pupils perform the following steps by solving 1 problem:

- At the 1st stage, he sees and imagines.
- Writes in the 2nd stage, works practically.
- At the 3rd stage, he thinks and thinks independently.

3) Pupils use their self-made items in the technology lesson as an exhibition at the 1st stage of problem solving. Through this, the teacher implements interdisciplinary integration. Pupils are more interested in making new things.

4) It is possible to create an innovative thinking process in children by solving practical problems in the indicated way.

5) Problems such as loss of attention and mental strain are prevented during the lesson. Because the stages of problem solving are not uniform and are equally understandable for children with different levels of knowledge.

Conclusion: *In short, it can be said that by solving problems of a practical nature in elementary education mathematics classes using various drawings, pictures and base-schemes:*

1. Pupils are given a clear idea of what to find in the problem;

2. The problem is solved quickly and easily;

3. The shapes in each drawing and picture provide familiarity with certain elementary geometric figures.

REFERENCES:

1. *Abduraximova Dilora Karimovna. (2023). ISSUES OF WIDE IMPLEMENTATION OF FINANCIAL TECHNOLOGIES IN THE GLOBAL FINANCIAL MARKET. European Journal of Interdisciplinary Research and Development, 20, 67–76. Retrieved from* http://ejird.journalspark.org/index.php/ejird/article/view/797

2. *Атаходжаева, Г. А. (2017). Возможности комплексного медикаментозного лечения эндотелиальной дисфункции у больных с хронической сердечной недостаточностью и метаболическим синдромом. Журнал теоретической и клинической медицины, (1), 59-63.*

3. *Abdurakhimova, P. D. THEORETICAL AND PRACTICAL FOUNDATIONS OF BANKING INNOVATIONS'IMPACT ON ECONOMIC DEVELOPMENT OF COUNTRIES.*

4. *Xolmanova, Z. (2020). Kompyuter lingvistikasi. Nodirabegim:.-Toshkent, 247.*

5. *Abduraximova Dilora Karimovna. (2023). THE NEED TO INTRODUCE FINANCIAL TECHNOLOGIES FOR THE DEVELOPMENT OF THE BANKING SERVICES MARKET. Academia Science Repository, 4(05), 54–62. Retrieved from http://academiascience.com/index.php/repo/article/view/439*

6. *Сабирова, Н. Э. (2018). ОСОБЕННОСТИ СИМВОЛОВ ОБРЯДОВЫХ ПЕСЕН, СВЯЗАННЫХ С ДРЕВНИМИ КУЛЬТАМИ. In INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION (pp. 73-74).*

7. *Abduraximova Dilora Karimovna. (2023). BANK INNOVATIONS AND THEIR IMPACT ON THE ECONOMY. Open Access Repository, 10(11), 44–50. Retrieved from https://www.oarepo.org/index.php/oa/article/view/3717*