# THE SIGNIFICANCE OF FOLK GAMES IN THE FORMATION OF MATHEMATICAL IMAGINATION

Djurayeva Perdegul Saidovna

Navoi region National center of training teachers to new methods, acting associate professor of the department "Preschool, primary and special educational methods" https://doi.org/10.5281/zenodo.8151765

**Abstract.** We need to teach our national values, traditions and customs to the students, to deeply understand them. It is necessary to develop both the content of the elementary mathematics course and the methodology of using textbooks and manuals.

*Keywords:* primary education, our national values, traditions, the content of teaching mathematics, logical structures of thinking.

## Introduction

What should modern primary education consist of? What knowledge should a child have in grades 1-4? The fundamental questions of when, how, and in what manner should we teach our national values, customs and traditions to the students, are extremely important in terms of their scope and importance in front of the primary education system. should be studied as factors requiring the implementation of changes.

## **Research materials and methodology**

Setting new goals for school education leads to a radical change in the content of teaching mathematics. Mathematics requires development both in the content of the elementary course and in the methodology of using textbooks and manuals. The word mathematics is derived from the Greek word "mathema" which means "knowledge of science". The subject of mathematics consists of spatial forms and quantitative relationships between them.

The purpose of the school mathematics course is to provide students with mathematical knowledge, taking into account their psychological characteristics. This system of mathematical knowledge is delivered to students through certain methods and methods. The word "method" here is a Greek word meaning "way". Methodology of mathematics is a branch of pedagogy, which is included in the system of pedagogical sciences, and applies the laws of teaching set by society at a certain stage of the development of mathematics. Setting new goals in teaching leads to a radical change in the content of teaching mathematics. In order to provide effective mathematics education to elementary school students, it is necessary for the teacher to acquire and thoroughly master the methodology of teaching mathematics in elementary grades.

Effective use of folk pedagogy, one of the main areas of pedagogy in the formation of students' moral education in the teaching of mathematics methodology, skillfully using the ways of imparting knowledge to enrich the world of mathematical imagination of children through it, is considered one of the main tasks of the present time.

Elementary mathematics course helps to develop children's thinking. In this way, basic knowledge creates a single set, and on the other hand, it is directed to the formation of necessary methodological ideas and logical structures of thinking.

Psychologists have proven that 6-10-year-old children are responsible for the formation of thinking skills. Therefore, one of the tasks of the primary education methodology is to accelerate the impact of teaching on the mental development of children while ensuring a sufficiently high

developmental effectiveness of teaching. It is important to know and take into account the level and capabilities of mental activities of primary school students, since the mental development of children is founded in primary grades.

As a means of teaching primary education methodology, through educational, educational, spiritual and didactic games, from the point of view of logic and mathematics, folk games, action games and folk games it is necessary to increase the ways of developing mental abilities of children by using examples of oral creativity. Problems arise in the content of teaching children from 6-7 years old. It can be eliminated only through good teaching. Learning to count, adding and multiplying at level 1 (out of 20) is considered the main task of primary education. This task is taught mainly in two ways:

1. Pedagogical way, that is, preparing children's thinking for applied mathematical reasoning;

2. The way of mathematics; that is, preparing children to learn the most important mathematical concepts, first of all, natural numbers and geometric shapes.

The objectives of teaching the elementary mathematics course are determined by the following 3 factors:

1. The general educational purpose of teaching mathematics;

2. The educational purpose of teaching mathematics;

3. The practical value of teaching mathematics.

1. The following tasks are set for the general educational purpose of teaching mathematics: a) providing students with mathematical knowledge based on a specific program. Also, they should master the basic methods of their knowledge and control; b) it is necessary to develop the oral and written mathematical knowledge of students - in this regard, it is necessary to form the speech culture of students in their native languages, to express their thoughts clearly, clearly and concisely. It should help to master the skills of being able to explain; c) teaching students to know the truths based on mathematical laws - spatial imagination is formed and their logical thinking is further developed.

2. The educational goal of teaching mathematics sets the following tasks:

a) formation of students' scientific worldviews;

b) fostering students' interest in learning mathematics;

c) formation of students' mathematical thinking and mathematical culture.

Expressions, symbols of actions, concepts and laws between them taught in mathematics lessons teach students to think critically.

3. The practical purpose of teaching mathematics sets the following tasks: a) to teach students to be able to apply the knowledge they have acquired in the mathematics lesson in solving elementary problems encountered in everyday life, to teach them to solve practical problems specially designed to form and strengthen the skills of performing arithmetic operations; b) formation of skills in the use of technical tools and visual aids in mathematics. In this, the main focus is on developing students' skills in using tables and calculation tools; c) to teach students to independently acquire mathematical knowledge, they should, as far as possible, independently establish relationships of law, make generalizations as much as they can, and also learn to make oral and written conclusions.

In primary school mathematics, common tasks for all didactic materials are classified by complexity. Completing a method of a task on a certain topic according to the chosen idea of this

material also testifies that the student has only mastered this topic. In practice, teachers often say that one method of a task is simpler or more complicated than another. In addition, no matter how artistically the didactic materials are created, no matter how fruitful and deep ideas are implemented in their content and structure, they are still not able to quickly solve all methodological tasks.

Therefore, didactic materials should be considered as one of the methods of controlling the level of mastering of educational materials by students. At the same time, a certain method may be the best method for this class, for this teacher. For this reason, didactic materials cannot free the teacher from creating types of supervision for individual verification of students' level of mastery of knowledge. This is one of the main tasks of general methodology. In the current era, the rapid development of science puts the task of getting deeper into the content of the knowledge being studied before young people. In this, it is important to study the history of each science, to become familiar with the stages of its development.

Based on this, there is a need to create a new guide dedicated to the history of mathematics for those interested in this subject. From elementary grades, it is important to consistently introduce students to the history of mathematics, our national values, and discoveries in the formation of the worlds of imagination formed in accordance with it, to enrich their thinking, to increase their interest in science, and their aspirations.

# **Research results.**

In ancient times, people first encountered functional connections in their practical activities. For example, they understood that the more products are made in handicrafts, the more profit there is, that is, the quantity of products depends on profit. Later, they tried to understand various real-life examples that create a similar inverse proportional relationship. Together with this, they investigated the dependence of the volumes and faces of geometric shapes on their dimensions.

In ancient times, having mastered the doctrine of gnomics - sundials, people determined the time with the help of a tool, that is, by studying the tables determined by the length and direction of the shadow perpendicular to the ground, the length of the section, graphs: straight, uneven, who are able to consciously distinguish between the concepts of curved and straight lines. Imagination improved the visualization of spatial geometric shapes and thinking about variable quantities.

When teaching elementary schoolchildren the first mathematical concepts through various games, it is necessary to provide information about its history from time to time. In it, it is appropriate to emphasize that the science of mathematics came into being with the appearance of special symbols for defining actions, and give brief information. In history, there are assumptions that the appearance of plus "+" and minus "-" signs was mainly caused by trade, according to which, the decrease of goods is marked by horizontal lines (-), and its replenishment is necessary It is necessary to say that the increase of dashes in the number is marked with (+). The beginning of mathematics started from very ancient times and lasted until 7-5 centuries BC. Our first ancestors were engaged in counting things, exchanging them, later trading, measuring the land, calculating the size of spatial figures, and developed mathematical knowledge. Early mathematical knowledge was of a practical nature.

For example, people developed the concept of number by counting the products they farmed, the tools they made, the animals, fowls, and beasts they produced, as well as other finite

numbers. The concept of number, which has become the main concept of mathematics for centuries, originated from the practical needs of those people. The first stages of the history of the creation and development of numbers can be described as follows:

The natural number was created due to the need to count things and various things. The positive fraction was created due to the need to measure and divide quantities. Negative numbers were created due to the needs of mathematics, that is, solving algebraic equations and theoretical reasoning. The number zero is created by the introduction of negative numbers.

In history, world scientists have classified science as follows: "Numbers can be said to control nature quantitatively." Z. Maxwell.

"Amazingly, the science that started with the study of games has risen to the level of an important field of human knowledge." P. Laplace.

"No science can strengthen faith in the human mind like mathematics." G. Steinhaus.

People have created the concept of quantity by measuring, counting and comparing the length of distances, the surface of shapes, the size of objects, the temperature of the air, the abundance of crops, the weight of objects and other things. The concepts of quantity and number have been organically developed and improved. Over the centuries, these concepts have been condensed in form, and the knowledge about them has become richer in content. Later, people used the concepts of natural number and quantity in calculations and expressed the quantities describing the work results with numbers.

People were not satisfied with counting things, but also performed such things as measuring, calculating, and dividing the results of the work into equal parts. As a result, in order to accept the above-mentioned mathematical terms and concepts more easily, to use them rationally in the education of children, to express their thoughts and imaginations, to study and count the abilities of others, and to clarify their minds, later people will be consciously aware of them. "in oral and written forms, interesting, playful and cheerful poetic games that can attract attention, promote ingenuity, riddles, quick-witted tales, numbers, proverbs, numerous explanatory black words" They have been improved from generation to generation, changing their content and form according to the requirements of the times.

### Discussions.

We know that adults compare children to a ball that bounces blue when it hits the ground. Because they cannot sit still for a minute. Game lovers cannot imagine their life without street and games. In fact, that is the dearest and most unique aspect of children! It is not for nothing that world-famous scientists-writers and poets who benefit the society and people are more playful and jump into the sky when they hit the ground. This situation is very important for the growth of their creative thinking.

We used to dance around the house, always in the dust.

I didn't know why that place, - says A. Oripov.

Courage, persistence in the face of difficulties are all related to games. In ancient times, there were many types of games. Horse game, ball game, bathing game, stone game, chillak game, nut game, building game, mobile game, jona game. game sheet...

Can they be counted? Our grandfather Gani Jahangirov wrote a meaningful book about the ancient children's game and children's folklore in general. According to that person, the roots of today's children's games go back to ancient times. In the works of our grandfathers Mahmud Kashgari, Abu Rayhan Beruni, Abu Ali ibn Sina, there are many information about children's

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creativity and folklore games. In particular, the book "Devoni-lugatit Turk" contains interesting information about the types and directions of games. If we take the recent past, Gafur Ghulam's work "Shum bola" contains very valuable and interesting information about children's games. Hammompish is an old almost forgotten game. The summer season was mostly favorable for this game. It can be tentatively called a "building game". Its own name with itself: bath, pish.

That is, the children took out a ball shaped like a ball from the lumpy soil, pounded it, cooked it, and made it into the shape of a bathhouse dome. This process does not use water. It can also be done wet by sniffing.

After the cooked "bath" has dried a little, it "opens its door" in accordance with its task, and then carefully begins to remove the soil from the inside of this raw "building". The point is that if the "bath" with soil is gently filled and taken out does not fall, but keeps its shape (it looks like a cistern), it means that the players are "ripe". Most of the "bathroom immature" children's baths are played, and it cracks before half way. Construction starts again. And so the game continues. In this game, children develop the ability to build, engineer, and calculate. The ability to work will increase more and more.

The clay game is also made by making a bowl, bowl-like shape from clay, hitting it on the ground with the side of the mouth and making a crackling sound. After repeating this several times, the clay becomes very hard and can be molded into the desired shape. It also enriches the imagination to know about construction, clay, damage, who made how many, and how many of them were good and of good quality.

# Conclusion

Children's folk games, no matter what form, subject, or direction they have, whether they are made with clay, wood, sticks, rope, bark, cloth, whatever they are, played the role of a special vocational school for enriching mathematical ideas in preparation for life, marriage, and livelihood. Children's folk games are a unique work. They have a certain creative direction, they have their own meaning and device. For example: children are called to the game before gathering.

To start the game, a check or lot is thrown. It is divided into 2-3 creative competition groups. The game starts according to the rules. It can be chillak game, doppi game kushimboshi, ball game, lapar game and other stone games. Of course, just as games have a beginning, they also have an end and a limit. "House-to-house, hill-to-house", "Khitob-khatima" from ancient times indicate that the game has a good, harmonious, friendly and useful ending. The goals of the games are also different. They can be aimed at teaching numeracy, learning the language, developing the respiratory system, increasing the memory of the child, etc. The following examples are songs that can be sung during children's games with different goals.

One or two, sixteen,

Who said sixteen?

I said sixteen.

If you don't believe it, count it. (It is determined that he committed a crime).

**PROVERBS**:

1. Wise men say that man is given one mouth and two ears so that he can speak less and listen more.

2. If you cut one, plant ten.

3. One person opens a ditch, a hundred people drink water.

4. Knock down one with great skill, defeat a thousand with great knowledge.

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- 5. One brave person makes the whole country famous.
- 6. Take care of yourself.
- 7. One head is right, two are better.
- 8. Bring both feet to the same destination.
- 9. Two and a half-one whole.

10. If you can get it, you will eat it in your mouth.

FROM THE POETRY GAME SONGS:

You count to eight ...

Be very careful.

Eight without counting,

If you put it, it will be a shame.

Think first and speak later,

The demand of this issue.

- Confused without calculation,

Find the answer, he says.

PUZZLES:

Two fools careless,

He lies in a palace.

If someone comes out,

FLASHES and sparks. (match)

One yard for five children. (gloves)

A piece of bread, a cake to the world. (month)

Red girls in forty rooms. (pomegranate)

Seven holes in one pile. (head, mouth, nose, eyes and ears)

Once spilled, never spilled again. (honour, or)

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