

## TECHNOLOGY IN THE CLASSROOM CAN IMPROVE ELEMENTARY MATH

Abdinazar Salomov

Chairman of the Department of Primary  
Education of Surkhandarya Teachers Training Center,  
Doctor of Philosophy, Associate International Professor  
Uzbekistan, Termiz.

### Abstract

This material discusses the possibility of using some pedagogical technologies in mathematics lessons.

**Keywords:** mathematics, primary grades, teaching methods, academic performance, game, teacher, students.

### Introduction

Many parents begin to demand less technology in elementary school due to the amount of time children spend at home. This raises questions about whether technology in the classroom helps or hinders learning, and whether it should be used to teach mathematics.

We often hear complaints that children have lost the ability to do simple calculations due to the use of calculators in primary schools. This is not an option. In fact, very little research has been done on the use of calculators in classrooms since the 80s and 90s because they are not an essential feature of elementary school math lessons. When calculators are used in elementary grades, they usually help children develop number sense, explore number patterns and relationships, or test the accuracy of mental or written calculations. There is also evidence that children are becoming more flexible in the way they calculate using calculators.

This allows them to apply their knowledge of seat value and other number-related concepts rather than using a traditional algorithm.

The curriculum also promotes thinking and doing mathematics (called "skills"), not just mechanics. There is much more to mathematics than to calculations. This is where more modern technology can improve elementary math. The Importance of Technology in Teaching Mathematics.

It's important to note that these are the same devices that many children already have access to at home, providing an opportunity to bridge the gap between math at school and their lives outside the classroom. The literature on digital technology and mathematics suggests that new technologies have potentially transformed teaching and learning, providing opportunities to move from a traditional view to a more problem-solving one. This notion is supported by research that argues that the traditional view of mathematics, focused on memorization and memorization, has now been replaced by one that has purpose and application.

When used correctly, technology can improve students' interactions with mathematics and help improve their understanding of mathematical concepts. An added bonus was that children voluntarily began using their screen time at home to do math. Pre- and post-test data also showed that technology use contributed to improved math scores. Our new 21st century is a time when the development of information technology has come to the fore. Not a month goes by without some new invention being announced somewhere in the world. Nowadays, most of human activity is controlled by smart

gadgets[3]. As you know, the basis of all these newfangled inventions is calculation and precise calculation, more precisely, mathematics. She is called the queen of all sciences. It must be admitted that this subject is one of the most difficult subjects to study in a secondary school. Teachers of this discipline have an order of magnitude more difficulty compared to other teachers in the learning process to awaken students' interest in their subject. Elementary school teachers especially have to be creative. In the course of numerous studies and observations, it was found that children's sensitivity to the subjects studied at school can develop in a positive direction[4]. A child who, for example, experienced certain difficulties in spelling letters or symbols, can significantly improve his performance in this area at school.

The same can be said about reading lessons - a student who in preschool had difficulty remembering the names of letters or retelling various texts, at school can learn to quickly read and retell any type of text from memory. But the same cannot be said about mathematics. As was noted, children who had difficulties with this subject in kindergarten in the realities of primary school aggravated their problems. To put it simply, a child who could not correctly perform the simplest mathematical operations continued to experience the same problems at school. Since the program for further teaching mathematics involves changes in the direction of complexity, it becomes obvious that a student who does not have the skills to perform the simplest operations of mathematics, in this case addition and subtraction, will in the future be left behind from his classmates who do not have such problems[5]. And this can significantly affect the self-esteem of underachieving students and, as a result, reduce their interest in school activities, which in turn will lead to general academic failure.

It must be admitted that while there is a huge number of studies aimed at studying teaching methods in the primary grades of secondary schools, there are not many of them that are devoted specifically to the problems of teaching mathematics in this period. In addition, there are no serious assessments of the effectiveness of educational technologies. Even fewer consider how teaching methods may affect students who are behind the curve[6]. Why is studying issues related to mathematics teaching so important? Because it was found that a student who did poorly in this subject, first in elementary school and then in high school, continued to show disappointing results in subsequent stages of education. As a result, in the future such a student was forced to choose as a profession those types of activities that do not require in-depth knowledge of mathematics. This means that initially such a student acted as an outsider who had to be content with low pay for such work.

As a result, in the future they may certainly fall into a group that can quickly lose their jobs due to their low qualifications[7]. All this shows how important knowledge of mathematics is for every person in our time. Primary school teachers, who have many students who are unsuccessful in a given discipline, strive to use a variety of methodological techniques aimed at improving the performance of lagging students. But, it must be admitted, these methods either do not have any positive impact on the success of students, or they help only those children who are already good at mathematics, leaving their weaker classmates far behind.

It is known that in teaching mathematics, methods are used that can be divided into four groups: 1) Management method: This is our more traditional method of teaching, in which teachers first showed how to solve problems and then asked students to try to solve a similar problem on their own. This technology is used everywhere. It has its advantages and disadvantages. The positive side of this method is that the student sees a clear demonstration of the solution to a mathematical problem and

the practical application of the rules of the lesson topic studied in this topic. Using a problem solved by the teacher as an example, he learns to easily solve such problems. The negative aspect of this technology is that the majority of underachieving students in such cases remain, as it were, in the shadow of the leaders. All their actions come down to copying problems solved by others. It is clear that such a student will never master the material taught in the lesson. Why is this method called managerial? Because in it the teacher manages the entire lesson process, taking on the main points. 2) Student-centered model: This method involves the work of students divided into groups[8].

It allows children working in groups to create their own mathematical hypotheses and apply them to real life. 3) Manipulative-calculative method. Involves children working with physical objects to solve math problems or using calculators. 4) The “movement music” method. It includes methods in which students move themselves and use musical accompaniment. All these methods are aimed at improving the perception of mathematics curriculum topics. When teaching this discipline in primary school, the management method and the “music movement” technology are more effective.

The first named method is preferable because in the elementary grades the child still feels an urgent need for a mentor who can guide him on the right path to solving the problem, encouraging his desire for diligence. At this age, children are vulnerable to criticism from others, tend to follow all the instructions of the teacher and often blindly obey his instructions[9]. But with systematic use of this method, the student may get bored: the monotonous explanation and subsequent independent solution of the problem will be repeated day after day. The child shows a decrease in attention to the material being studied, he stops delving into the essence of the issue. For this reason, an experienced teacher should be able to sense such a moment. In such cases, the “movement music” method comes to the rescue. This technology is notable for the presence in it of an element of movement accompanied by music. In the primary grades there are students who are still under the influence of the rules adopted in preschool institutions[10]. And they involve a lot of movement. Kindergarten teachers are well versed in the skills of turning the learning process into an exciting game that would undoubtedly interest the child. This means that primary school teachers should also be familiar with similar methods. However, teachers must have improvisational skills because children must believe that this game is truly meant for them. What games can be used in mathematics lessons? In the elementary grades, especially in the first year of school, students are given ideas about addition and subtraction[11]. When using the “movement music” method, you can successfully use the game of chairs: Children stand in a circle, inside which there are chairs, one less than the children. The music turns off and the children walk or run around the chairs. When the music is turned off, they must very quickly take their chairs. Since there are one fewer chairs, the student who fails to sit is eliminated from the game. The teacher writes on the board the total number of children who took part in the game and subtracts one from it, for example:  $15-1=14$  Then the game starts again. One chair is removed each time. And each time the number of remaining students is written on the board as an example. In the end, in the middle of the circle there remains one chair and two participants. One of them will definitely win this game. In this case, an impressive number of mathematical examples are formed on the board. Having rewarded the winner of the game and encouraged the loser, the teacher draws the students’ attention to the blackboard and asks them to remember where each number in each example came from[12]. This can be done either collectively in a choir or individually by asking individual students. As practice shows, an individual survey in this case is more preferable, since with

a collective survey there is a risk that students noted for poor performance in mathematics will remain on the sidelines, dissolving in the voice of students who are more successful in this area[13]. With an individual approach, the teacher has the opportunity to involve such children in the educational process, give them the opportunity to express themselves, and understand that this subject is not as difficult as it may seem at first glance.

The use of such games during the lesson makes it bright and memorable, students relax and easily assimilate the taught material, memorizing it. In the future, as various studies in this area show, a student, when associated with such a game, can easily remember the topic of such a lesson, even after a long period of time. Such methods and techniques are designed so that children can master such a serious and necessary subject as Her Majesty mathematics.

#### REFERENCES:

1. Ишмухамедов Р., Абдукадыров А., Пардаев А. “Ta`limda innovatsion texnologiyalar”, Ташкент, 2008. — 182 с.
2. Д. К. Абдурахмонова “Бошланғич синф ўқитувчилари учун болага таълим бериш билан биргаликда уларнинг ҳаётини кўникмаларини ривожлантиришга қаратилган машқлар тўплами”, Ташкент, 2008. -36 с.
3. Салохитдинова, Н. (2021). Development prospects of primary education integration (on the example of exact and natural sciences). *Общество и инновации*, 2(7/S), 221-225.
4. Salokhitdinova, N. M. (2020). PROVIDING MEMBERSHIP BETWEEN TESTING AND INTERNATIONAL ASSESSMENT PROGRAMS FROM PRIMARY SCHOOL MATHEMATICS (An example of elementary school math). *Scientific and Technical Journal of Namangan Institute of Engineering and Technology*, 2(12), 14-19.
5. Салохитдинова, Н. (2022). Aniq va tabiiy fanlar tushunchalarining integratsiyasi (Aniq va tabiiy fanlar misolida). *Современные тенденции инновационного развития науки и образования в глобальном мире*, 1(3), 368-371.
6. Salohiddinova, N. (2022). INTEGRATION OF EXACT AND NATURAL SCIENCES CONCEPTS (On the example of exact and natural sciences). *Emergent: Journal of Educational Discoveries and Lifelong Learning (EJEDL)*, 3(11), 158-165.
7. Salokhitdinova, N. M. (2021). Current state of science integration in primary education. *Asian Journal of Multidimensional Research (AJMR)*, 10(3), 533-537.
8. Салохитдинова, Н. (2021). Перспективы развития интеграции начального образования (на примере точных и естественных наук). *Общество и инновации*, 2(7/S), 221-225.
9. қизи Салохитдинова, Н. М. (2023). БОШЛАНҒИЧ СИНФЛАРДА ИНТЕГРАЦИЯЛАШГАН ТАЪЛИМНИ ТАКОМИЛЛАШТИРИШ (Аниқ ва табиий фанлар мисолида). *RESEARCH AND EDUCATION*, 2(4), 123-132.
10. Khamzaeva, D. S. (2020). THE PROBLEM OF SEASONALITY IN TOURISM. *Theoretical & Applied Science*, (11), 337-340.
11. Khamzaeva, D. S. (2021). ASSESSMENT OF THE SEASONAL FACTOR IN REGIONAL TOURISM AND THE WAYS OF ITS USE. *Happy New Year*, 25.

12. Samarovna, X. D. (2020). RAQAMLI IQTISODIYOT SHAROITIDA TURIZM INDUSTRIYASINING TARAQIY RIVOJLANISHIDA TURISTIK MAHSULOTLAR TAKLIFINI MAVSUMIYLASHTIRILISHI UCHUN USLUBIY YONDASHUVLARNING SHAKLLANISHI. Иқтисодиётда инновация,(SPECIAL 2).
13. Хамзаева, Д. (2022). ТУРИСТИК МАҲСУЛОТЛАР ТАКЛИФИНИ МАВСУМИЙЛАШТИРИШНИ ТАКОМИЛЛАШТИРИШ ЙЎЛЛАРИ ВА ИСТИҚБОЛЛАРИ: [https://doi.org/10.55439/ECED/vol23\\_iss3/a52](https://doi.org/10.55439/ECED/vol23_iss3/a52). Economics and education, 23(3), 337-341.