

THE USE OF MODERN INNOVATIVE EDUCATIONAL TECHNOLOGIES IN
TEACHING ARITHMETIC OPERATIONS IN ELEMENTARY SCHOOL
MATHEMATICS LESSONS

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Annotation: This article analyzes the importance of modern innovative technologies in teaching arithmetic operations in elementary grades. As the authors note, through interactive tools, audiovisual materials and game technologies, it is possible to make the educational process interesting and effective. Especially in the development of mathematical logic and computational skills in children, these tools play an important role. The article outlines the practical applications of interactive whiteboards, mobile applications and online platforms (e.g. Khan Academy, Duolingo Math). These tools help to understand topics easily, increase student activity, and encourage independent reading. Opportunities to explore the subject in a practical light are also covered through visual and virtual laboratories. In the summary section, the author emphasizes the place of innovative technologies in improving the quality of Education. Protecting children from harmful content on social networks and directing them to useful educational resources is important in the development of the younger generation on the basis of modern requirements. This article provides practical recommendations for educators on the use of modern technologies.

Keywords: arithmetic operations, innovative technologies, elementary education, interactive tools, audiovisual materials, game technologies, mobile applications, mathematical logic, online platforms, educational efficiency, visual laboratories, pedagogical activity.

Today, the use of innovative technologies in the educational system is considered very important. Children can use technologies from the age of 4 or 5, it is important for them to use audios, videos to make the lesson interesting. With modern tools, it is possible to interest children who have made the first step to school in mathematics and other subjects. The use of technologies in teaching arithmetic operations in elementary grades makes classes more interesting and effective.

The use of innovative technologies in teaching arithmetic in the modern educational system serves to improve the quality of the educational process, and is important in increasing students' base competencies in mathematics. We use innovative technologies to make classes more interesting [1].

1. Educational technologies used to teach arithmetic operations:

Interactive tools (electronic tools, digital platforms);

Audiovisual materials • video materials;

Gaming technologies and mobile applications.

2. Impact of educational technology on the learning process of students:

Increase activity and interest;

Ease the understanding of the subject.

3. Practical application of technologies in teaching arithmetic operations:

Solving Masas through online classes and programs;

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Use of visual and virtual laboratories.

The main purpose of teaching arithmetic operations in elementary grades is to develop mathematical logic in students, to shape computational skills, and to provide basic knowledge that is important to them. From a young age, activities such as adding, subtracting, dividing and multiplying are considered necessary in the life of children and they are obliged to know these steps even to simply buy something from the store. Reading numbers 5 and 6 before graduating from Grade 4, the child must know whether to add them together or subtract them. Interest in mathematics in children preparing them for future life is one of the main tasks of an elementary school teacher. Children should learn math or arithmetic, believing that they are needed in the future, and not for the lesson [2].

Educational technology can be used in elementary grades not only to explain the topic of the lesson, but also to repeat and consolidate lessons. Currently, social networks have interesting video, audio and multimedia textbooks for children, as well as financial programs on various sites and channels, through which it is possible to work with children. Through such technologies, not only children, but also educators can exchange ideas with one another. Such methods can form the skills of educators to increase work experience, work with points. Novice educators can exchange ideas with experienced educators, get help from them, and ask them for skills in how to work.

Educational technologies used in teaching arithmetic operations.

Visualization of arithmetic operations using interactive tools - electronic whiteboards and digital platforms-helps children more easily understand complex concepts. Interactive tools increase student participation in the classroom and actively engage them in solving issues.

Audiovisual materials-videos and animations are effective tools in explaining arithmetic operations. These materials ease the understanding of the subject while attracting the attention of readers. For example, explaining simple addition or subtraction actions using colorful animations has a big impact. Game technologies and mobile applications - learning arithmetic steps through math games and mobile applications will increase the interest of students. Such tools organize the process of acquiring knowledge in the form of a game and attract children to an interesting and effective education [3,4]. The impact of educational technologies on the learning process of students.

Increased activity and interest - interactive technologies make classes interesting and ensure active student participation. These tools give students the opportunity to find an independent solution.

Easing the understanding of the topic - modern tools help to convey complex topics in an easy and understandable form. Visual materials store information better in readers' memory.

Practical application of technology in teaching arithmetic practices - in solving issues through Online training and practical programs, through platforms such as Duolingo Math, Khan Academy, students independently perform exercises and strengthen their knowledge. These programs have an automatic evaluation system that allows for a quick analysis of the results.

The use of visual and virtual laboratories - visual tools and virtual laboratories allows you to study arithmetic operations in a practical way. This method develops a deeper understanding of the subject and practical skills in students [5,6].

In conclusion, the article analyzes in detail the importance and practical application of modern innovative technologies in teaching arithmetic operations in elementary education. With interactive tools, audiovisual materials and mobile applications, opportunities are shown to interest students in mathematics and to explain the topic more easily. These technologies activate the learning process, making learning interesting and effective.

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The article also covers the successful use of online platforms, game-shaped applications, and virtual labs in teaching arithmetic operations. These methods not only increase the interest of students, but also form for them the ability to independently solve complex issues.

The wide introduction of innovative technologies in the educational process serves to improve the quality of education and educate the younger generation on the basis of modern requirements. Especially the effective use of these technologies by educators can significantly improve the effectiveness of the educational process. The article reveals the importance of innovative approaches in the modern educational system and their positive impact on the educational process.

REFERENCES USED

1. **J.B. Mamadiyurov.** Development of practical activity skills of students in mathematics in e-learning environment // *Academicia An International Multidisciplinary research Journal* 2021. – В. 1873-1877.
2. **Ж.Б. Мамадияров.** Методика преподавания математики в общеобразовательном школе с использованием современных информационных технологий // “Problems of modern education” Materials of the XI international scientific conference on September 10–11, 2020 Praga. –Б. 43–47.
3. **Taylakov Norbek Isakulovich, Mamadiyurov Jamol Bahodirovich.** Innovative Approach to Teaching Mathematics in Schools of the Republic of Uzbekistan // *ACADEMICIA An International Multidisciplinary research Journal South Asian Academic Research Journals* A Publication of CDL College of Education, Jagadhri (Affiliated to Kurukshetra University, Kurukshetra, India) – 2020 yil 20 may 116–121 бетлар.
4. **Абдуллаева Б.С.** Формирование информационной компетентности школьника. Formation of information competence of students // *Eastern European Scientific Journal. AURIS Kommunikations - und Verlagsgesellschaft mbH Dusseldorf. Germany: Ausgabe 3. 2018.* – P. 183-187.
5. **J.B. Mamadiyurov.** Psychological possibilities of development of creative-practical skills of future primary class teachers // “Results of modern scientific research” international scientific and current research conferences. January 30, 2023, USA. P. 149-152.
6. **J.B. Mamadiyurov.** Methodology of Development of creative-practical skills of future primary class teachers // “Vital issues of modern scientific research” international scientific and current research conferences. March 20, 2023, USA. P. 128-130.