

IMPROVING THE METHODOLOGY OF TEACHING MATHEMATICS IN PRIMARY GRADES

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Abstract. *In this article Improving the methods of teaching mathematics in primary school The article highlights the content of the use of digital technologies in the process of expanding the possibilities of independent learning in digital education, and also determines the level of effectiveness of the results obtained on the basis of experiments.*

Keywords: *Digital education develops talent, motivation, innovation, creativity, critical thinking and problem solving skills. student work.*

BOSHLANGICH SINFLARDA MATEMATIKA O'QITISH METODIKASINI TAKMORLASH

Annotatsiya. *Ushbu maqolada boshlang'ich sinflarda matematika fanlarni o'qitish metodikasini takomillashtirish raqamli ta'lim sharoitida mustaqil bilim olish imkoniyatlarini oshirish jarayonida raqamli texnologiyalardan foydalanish mazmuni yoritilgan, shuningdek, tajribalar asosida olingan natijalarning samaradorlik darajasi aniqlanadi.*

Kalit so'zlar: *raqamli ta'lim iste'dod, motivatsiya, innovatsiya, ijodkorlik, tanqidiy fikrlash, muammolarni hal qilishga o'rgatish. talaba ishi.*

СОВЕРШЕНСТВОВАНИЕ МЕТОДИКИ ПРЕПОДАВАНИЯ МАТЕМАТИКИ В НАЧАЛЬНЫХ КЛАССАХ

Абстрактный. *В этой статье Совершенствование методики преподавания математики в начальных классах школы Освещено содержание использования цифровых технологий в процессе расширения возможностей*

самостоятельного обучения в цифровом образовании, а также определен уровень эффективности полученных на основе экспериментов результатов.

Ключевые слова: Цифровое образование развивает талант, мотивацию, инновации, креативность, критическое мышление и умение решать проблемы. студенческие работы.

INTRODUCTION

At present, in the scientific definition of methodology, a special place is occupied by integration (unification), synthesis - the unification of all scientific materials on any problem, as well as their analysis, generalization, systematization and unification into a single scientific theory.

The goal of integration is the "unification of knowledge" (unification), the unification of various fields of knowledge, as well as the compression of information in a certain sense, the isolation of the most valuable and important aspects. The introduction of integrated disciplines into the educational process creates the possibility of forming "generalized knowledge", which, in turn, "promotes the formation of individual thinking and consciousness" [2].

The learning outcome is determined by the acquisition of the material presented in the program. Therefore, teaching students teaching methods and ways of organizing the learning process goes hand in hand with teaching the process of their acquisition of the material.

Methods of teaching mathematics is a pedagogical discipline that covers the content and methods of comprehensive teaching of mathematics to children. It is based on the research conducted in the editorial work and uses its methods taking into account the content and specifics of teaching its subject. Teaching schoolchildren mathematics not only equips them with the knowledge and skills necessary for further education and practical activities, but also forms their worldview, will and character, develops intellectual abilities. Therefore, mathematics is interested in developing the forms and methods of teaching subjects. The learning process includes interrelated components - the content of the subject, teaching and students' activities, teaching the subject and acquiring skills.

LITERATURE REVIEW

In particular, Sh.S.Abduraimov writes in his scientific research: "Although such concepts as integration, interdisciplinarity, interconnection, continuity are widely used in editorial research, they are understood by teachers in a completely different sense. However, it is necessary to distinguish these concepts from each other in meaning. Recently, various views have formed on the interpretation of interethnic relations and integration. When implementing the integration of disciplines and training editorial personnel, a significant proportion of disciplines from the block of general educational and special disciplines. Future teachers acquire theoretical knowledge about the integration of disciplines and the ability to implement interdisciplinary connections in the process of studying these disciplines. When teaching psychological and editorial disciplines in the block of general professional disciplines, it is necessary to pay attention to the formation of professional qualities and components of professional competence in students, and also take into account the formation of the foundations of scientific and methodological competence through achieving a high level of psychological and editorial competence. The components of professional development in teaching subjects, implementing subject integration, harmonizing students' scientific and theoretical knowledge with scientific and methodological knowledge, implementing integration with social and humanitarian, mathematical, natural science and general professional disciplines are the formation and continuous development of students' relevant knowledge, skills, abilities and competencies. "It lays the foundation for raising the level of political, moral, spiritual, scientific, theoretical, psychological and editorial competence" [70].

In her research, B.S. Abdullaeva analyzed the work on developing the methodological skills of primary school teachers, improving teaching aids, improving mathematical thinking, and also improving the literacy of students.0].

S.R.ZokhidovaIt is emphasized that enrichment of classes with modern editorial methods should not violate the educational system and logic. The author emphasizes that modern editorial methods provide certain opportunities for the formation of creative abilities in students, as well as for their use in the educational process, and this information determines the content and methods of information support for the fundamentals of science [7].

According to U. Masharirova, The creativity of methodical teaching provides ample opportunities for learning various methods, techniques and tools in the vast treasury of education and upbringing. The methodology of teaching natural sciences is also closely connected with physiology, anatomy, hygiene, botany, zoology, geography, agricultural engineering, meteorology, logic and psychology [8].

RESEARCH METHODOLOGY

In the process of digital learning, teaching mathematics using information and communication technologies, as well as learning natural sciences using information technology tools, is considered a modern requirement. At the same time, computer-based teaching aids have been developed for teaching mathematics using computer technologies [3]. They are provided with modern virtual reality, computer simulators, testing and control programs, educational game resources, electronic teaching aids, video lectures, interactive 3D teaching aids, electronic simulators, electronic textbooks, multimedia applications, information learning environments, electronic books and encyclopedias, information retrieval systems. Examples include educational databases and intelligent relay systems [3]. The possibility of achieving better results is possible if the software used in teaching mathematics is adapted from an editorial and psychological point of view;

The importance of developing computer literacy of teachers in teaching mathematics;

The importance of increasing the efficiency of using modern electronic teaching and methodological materials for students when teaching mathematics;

Lack of experience using editing software in teaching mathematics;

Availability of modern programs and didactic tools for distance learning, as well as scientific research on their use;

The need to improve methodological requirements and the train preparation system;

It is concluded that sufficient efficiency can be achieved if the methodology of using computer didactic software in the educational process is completely scientific.

One of the most important and urgent problems facing educational institutions today is the improvement of methods and forms of teaching subjects taking into account the possibilities of computer technologies. The module is taught on the basis of virtual learning. The entire curriculum consists of many independent courses (modules).

Teachers can effectively test students at each stage of training. This plays an important role in natural science education, since independent learning is considered a modern didactic tool for improving students' subject knowledge, skills and competencies [1].

ANALYSIS AND RESULTS

The innovation is aimed at solving two problems in the field of education and innovation processes.

To develop the ability to foresee events, to understand the role of a person in real life and in future social and professional activities; To help form conscious, biased ideas, general behavior, beliefs, moral values and a general worldview of a person;

From the local level of organization and management to the global level, it enables people to actively participate in the process of making important decisions that have both social significance and professional value.

Changes in the organization and delivery of education have led to the emergence of intensive methods based on innovative educational technologies.

The intensive method is a teaching method based on interaction, i.e. cooperation, and it is also considered the most productive and effective. Intensive methods are notable for the fact that they are designed to develop academic competence in free-thinking, independent students. This teaching method assumes that the students themselves do the main work in the learning process; they are not the object of learning, but the subject, i.e. the performers, like the teacher. Intensive methods are based not on the joint work of students with the teaching, but on the didactic activity of students in cooperation with each other [5].

The purpose of the method: To enable students to think freely, independently and logically, to work in teams, to conduct research, to synthesize ideas and extract theoretical and practical understanding from them, to influence the community with their own opinions, to gain their approval and to use the acquired knowledge to explain complex concepts of the subject.

Application of the method: Students will be shown video materials on this topic via virtual reality. The virtual process of the expedition is carried out inside a 3D hologram.

Tools used in training: Handout with small topics on the left, markers (or colored pencils), 3D holographic projector, video material of the virtual expedition.

Training procedure: The teacher divides the students into small groups of 3-5 people, depending on the number of students (it is better if the number of groups is 4 or 5); Students are introduced to the purpose of the training and the procedure for conducting it. Each group is given sheets of paper with the names of animals written on the left side;

CONCLUSION

The teacher gives the group members the task of familiarizing themselves with the short topics presented in the handout and, based on this topic, together with the group, thinking about what they know on a blank sheet of paper using a felt-tip pen, and sets a time limit;

Group members work together to express their thoughts in writing (or with a drawing or picture) about the information provided in the handout. In this case, group members should provide as much detailed information about the satellites as possible.

The teacher comments on the materials prepared by the groups, The 3D hologram invites you to an open virtual expedition.

To make the topic more visual, students visit the universe of stars and planets. For students Creative tasks are given orally and completed vocally.

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