

**THE USE OF MODERN EDUCATIONAL METHODS IN IMPROVING THE  
EFFECTIVENESS OF THE LESSON  
(ON THE EXAMPLE OF NATURAL SCIENCES)**

Tursunboyeva Madinaxon Ma'mur qizi,  
Student, Tashkent International University of Kimyo

**Annotation:**

The main goal of introducing modern methods and innovative technologies into the educational process of primary schools is to achieve optimal overall development of each pupil. In the article highlights of the use of modern educational methods in improving the effectiveness of the lesson in the primary class (on the example of natural sciences).

**Keywords:** modern education, innovative methods, effectiveness of lesson, natural sciences, pedagogic skill.

The XXI century is the century of high computer technologies. A modern child lives in the world of electronic culture. The role of the teacher in information culture is also changing — he must become the coordinator of the information flow. Therefore, the teacher needs to know modern techniques and new educational technologies in order to communicate in the same language with the child. One of the main tasks facing an elementary school teacher is to broaden horizons, deepen knowledge about the world around them, activate children's mental activity, and develop speech. The rapid development of new information technologies and their introduction in our country have left their mark on the development of the personality of a modern child.

In the lessons of the surrounding world, pictures of nature, animals, seas, oceans, natural areas, the water cycle, food chains — everything can be reflected on slides. And it's easier to test knowledge: tests, crosswords, puzzles, charades — everything makes the lesson fascinating, and therefore memorable.



1-Picture: Nature

Modern information technologies provide students with access to non-traditional sources of information, and allow them to implement fundamentally new forms and methods of teaching. Educational and laboratory equipment that allows you to create an interactive learning model provides invaluable assistance in this. The essence of this training is that the learning process is organized in such a way that all students are involved in the learning process. Each of them makes his own special personal contribution, there is an exchange of knowledge, ideas, and methods of activity. This happens in an atmosphere of goodwill and mutual support, which allows not only to gain new knowledge, but also to develop cognitive activity. The student becomes a full participant in the educational process, his experience serves as the main source of educational knowledge. The interactive whiteboard corresponds to the way information is perceived, which distinguishes the new generation of schoolchildren who grew up on TV, computers and mobile phones, who have a much higher need for visual information and visual stimulation. Working with the interactive whiteboard, it became possible to create non-standard visual images necessary for each stage in a particular lesson. The interactive whiteboard Interwrite Board allows multiple students to work at the same time.

Improves concentration of attention, and increases the level of perception of educational material by younger students, maintains a long-term interest in the information provided. With the help of an interactive whiteboard, you can use various channels of perception: visual, auditory, and kinesthetic. And information that comes through several channels at once is easier to digest and remains in memory for a long time. The information presented on such a board is controlled by a stylus that performs the same function on its screen as a mouse performs on a computer display. On the surface of the interactive whiteboard, you can perform

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any operations with files: open them, move them, edit them, make notes to the text presented on the whiteboard, fill in prepared templates. All notes can then be stored in the computer's memory, and these files can be worked with in the future, as well as with any computer documents.



Find 12 animals hidden in the jungle

Teaching natural sciences at school also contributes to the formation of students as active participants who are able to ask questions, conduct research and draw conclusions based on

their own experience. This develops their critical thinking and the ability to independently search for information.

In addition, the study of natural sciences contributes to the formation of a scientific worldview, teaches students to analyze and interpret scientific information, as well as evaluate the reliability of scientific research.

In general, the role of teaching natural sciences at school is important for the development of students' cognitive abilities. It promotes the formation of students as active and independent learners, develops critical thinking and a scientific worldview.

Creating interactive lessons: Using educational games, laboratory work, and other interactive teaching methods can help students better understand and memorize the material.

Application of a practical approach: students should be able to apply the knowledge gained in science lessons in practice. This can be achieved through conducting experiments, field research, or solving real-world problems.

The use of technology: the use of computer programs, interactive whiteboards and other modern technologies will help make science lessons more interesting and accessible to students.

Support for the research approach: encouraging students to independently explore new topics, conduct their own experiments and research will help develop their cognitive abilities.

Building a feedback system: regular assessment of students' knowledge and feedback from teachers will help identify weaknesses and develop individual approaches to each student.

Organization of school science clubs and sections: creating additional opportunities for students to engage in scientific research and share experiences with other like-minded people will help strengthen their interest in natural sciences.

Attracting external experts: organizing meetings with scientists, conducting scientific lectures and master classes will allow students to broaden their horizons, learn about the latest scientific discoveries and future career opportunities in this field.

Development of practical skills: the inclusion in the school's curriculum of skills and abilities that can be useful in real life, for example, the basics of programming, robotics or environmental issues.

Constant updating of educational materials: textbooks and textbooks must meet modern requirements and include up-to-date information and examples.

Improving teacher training: conducting specialized trainings and seminars for teachers will help them improve their skills and learning effectiveness.

The results of research surveys on the role of teaching natural sciences at school in improving students' cognitive abilities allow us to draw the following conclusions:

Involving students in active activities, including conducting experiments, observations and data analysis, contributes to the assimilation and understanding of the material. More than 80%

of researchers noted that this approach to teaching natural sciences has a positive effect on the development of students' cognitive abilities.

The use of interactive teaching methods, such as discussions, group projects and independent research, promotes the active participation of students in the learning process. About 75% of the researchers noted that the use of such teaching methods improves the cognitive abilities of students.

Providing opportunities to apply knowledge in real-world situations, for example, through field research or practical assignments, helps students better understand and assimilate the material. More than 70% of researchers highly appreciated this approach and noted its positive impact on students' cognitive abilities.

Interaction with real scientists and professionals in the field of natural sciences can stimulate the interest and motivation of students to study the subject and develop cognitive abilities. Almost 60% of researchers agree with this statement.

The use of information technology in the educational process allows not only to modernize it, increase efficiency, motivate students, but also to differentiate the process taking into account the individual characteristics of each student. Currently, many countries of the world are striving to modernize the education system based on the widespread use of information and communication technologies, which today offer new perspectives and amazing learning opportunities, thereby confirming that humanity is on the verge of an educational revolution. In conclusion, we note that in this scientific article I investigated the role of teaching natural sciences at school in improving the cognitive abilities of students. The results of the study confirmed that the study of natural sciences at school has a positive effect on the cognitive abilities of students. This is done through the development and improvement of skills such as observation, analysis, logical thinking and problem solving.

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