



SPECIFIC CHARACTERISTICS OF IMPROVING TEACHING METHODOLOGY BASED ON DEVELOPMENTAL EDUCATION OF NATURAL SCIENCES IN PRIMARY GRADES

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Article history:	Abstract:
<p>Received: September 3rd 2022 Accepted: October 3rd 2022 Published: November 6th 2022</p>	<p>In the article, the nature and features of improving the teaching methodology based on the developmental education of primary classes are determined in accordance with the main goal of the educational paradigm and qualification requirements, as well as the scientific development of students' creativity, competence and natural-scientific outlook. to carry out research work, to effectively use the results of practical importance, to improve the educational system based on developmental education, to strengthen its national ground, to raise active, skilled, competent and competent students to the level of world standards It is stated that it is possible to increase the quality and efficiency of education in the improvement of the teaching methodology based on the issues of development and the development of primary school classes.</p>
<p>Keywords: Developmental education, primary class, education, interactive, outlook, modern, education, student, teacher, natural-scientific, education, lesson, method, form, creativity, skill, qualification, competence, practice, information, opportunity, improvement, pedagogy, system, process, scientific research, methodology, efficiency.</p>	

INTRODUCTION.

Today, there is a growing demand for the implementation of large-scale reforms in the field of improving elementary school classes based on developmental education, increasing students' natural-scientific literacy based on international assessment programs. In the agreement of BTM on the issues of education, science and culture "Import of materials of educational, scientific and cultural content", the creation of broad conditions for the quality of education of students worldwide and the educational process it is of particular importance to carry out scientific and research work on the introduction of modern innovative technologies[14].

In the world, it is of particular importance to carry out scientific research work on the improvement of the teaching methodology based on the developing education of primary school classes, the development of students' creativity, competence and natural-scientific worldview. In this regard, the use of media in improving the teaching methodology of natural sciences in primary classes, the scientific laws of increasing the effectiveness of educational activities, the need to improve didactic principles and the need to apply foreign experiences to primary education are explained.

Currently, in our country, on the basis of

developmental education, research is being carried out on the issues of improving the educational system, strengthening its national soil, raising the education of active, skilled, competent and competent students to the level of world standards. Important tasks such as preparing students who have independent thinking and a firm outlook on life, loyal to the motherland, deepening democratic reforms and increasing their social activity in the process of developing civil society were set for this[13].

ANALYSIS AND RESULTS.

Today, it is of particular importance to improve the methodology of teaching natural sciences based on media in primary classes, to increase the quality and efficiency of teaching, to adapt it to international educational standards, to increase the natural-scientific literacy of students, and to improve the educational system. is enough.

Modern teaching methods, methods, means of telecommunication, and teaching methods of natural sciences in elementary grades, educational information, software-pedagogical tools, and training materials that develop all teaching methods. it is important to determine the didactic requirements of the integration of applications into education, to analyze the methods of using developmental education



and information technologies in the teaching of natural sciences[12].

The term "developmental education" was originally introduced by V.V. Davidov to designate a limited number of phenomena, and soon entered mass pedagogical practice. Today, its usage is very diverse, and special research is required to understand its modern meaning.

The problem of developmental education interests teachers of many generations: Ya.A. Komensky and J.J. Russo, I.G. Pestalozzi and I.F. Herbert, K.D. Ushinsky, L.S. Vgotsky, L.V. Zankov, V.V. Davidov, D.B. Elkonin, N.A. Menchinskaya, as well as N.F. Talyzina, V.V. Repkin, S.D. Maksimenko and others. Naturally, research scientists in different historical periods express and interpret the development of education in different ways. The application of developmental education is so diverse that a special study is required to understand its modern meaning[1]. The complexity of the development of this subject and at the same time its positive side is the improvement of the teaching methodology based on the education that develops natural sciences in elementary grades is a component of didactics, and the development is a pedagogical process[21].

Organization of training sessions based on improving the teaching methodology based on developmental education of elementary school classes using media tools, computer programs and modern visual aids, presenting the studied materials more clearly and comprehensibly, and "helps to increase the imagination of students to a large extent[11].

It is known that in the teaching of all departments of natural sciences, students can have problems with imagination. The reason for this is that not all students have the same imagination and perception. If we use the topics of this textbook using video electronic programs and manuals with the help of special mobile phones and tablets, it will be possible to increase the student's imagination and get a stronger place in his memory. In addition, computer-based teaching, computer-based modeling of objects in the subject saves class time, and facilitates the teacher's preparation for the class[3].

For example, in the teaching of natural sciences in primary grades, when we cover topics such as the movement of some Sky, Earth, Sun, Planets, a model that can reflect the movement of objects without the user's influence on this movement, process, or event. understood as We can imagine events on a computer and use it as a media message[15].

The teaching process includes interrelated parts: subject content, teacher and student activities, subject teaching and skill acquisition[22]. Among the tasks of the teaching methodology based on the development of natural sciences in elementary grades is to

determine the content of natural science as an educational subject, to research the methods and methods of teaching, and to prepare the necessary educational equipment[8].

The teaching methodology based on the developmental education of natural sciences is not limited to the description and explanation of the teaching process, but also develops the rules, based on which the teacher can successfully teach students in this subject. possible In these activities, various devices are used to help students organize their thinking activities, and first of all, visual aids. Visual aids include natural or real objects and their model, photo, picture, diagram. Slides and films, TV shows and other technical means of teaching are increasingly used in teaching. Any visual aids are used for a specific purpose.

Currently, in teaching natural sciences based on developmental education, students are taught nature and work related to nature from the first grade in excursions and subject classes, and reading articles on the content of natural sciences from the textbook and the "Natural Sciences" textbook. in the process, they learn through direct observations[4].

Natural weapons are natural objects. They give more realistic ideas about the studied material and allow students to form natural concepts based on direct perception. Therefore, in order to study living nature in the classroom or in the science room, it is necessary to have various indoor plants, as well as branches, leaves, flowers, fruits and seeds typical for the trees of their place[23].

In the improvement of the teaching methodology based on the developmental education of elementary school classes, plants grown in the corner of living nature, as well as plants brought from the herbarium and excursions are used. Living nature objects in natural conditions are used during nature study lessons and excursions[16].

Natural objects can also be used to study animals. Although many animals can be shown to students in the classroom (in the living nature corner), special attention should be paid to excursions, because in this the students will not only see their appearance, but also they will have the opportunity to get acquainted with their characteristic actions and behaviors. In the absence of live animals, their puppets, dummies or photos and pictures can be used.

However, movies and animations that show live animals in natural conditions help to imagine them. In the study of inanimate nature, natural distribution material, for example, samples of granite, mica, quartz, feldspar, clay, sand, calcium, coal, iron, copper ores of various colors, as well as metals and alloys (iron, copper steel, aluminum), soil samples, etc[17].

You can use murals of local history in natural



sciences, as well as tables related to zoology, which will help to form ideas and concepts about objects of local history of nature. For the 2-3rd grades, the tables on various topics of natural sciences, as well as the topics of "Natural plants", "Cultural plants", "Domestic animals", "Diversity of animals" are also used using the series of pictures. 'can be learned[2].

In addition, "Natural sciences" provide comprehensive support to the growth of students' thinking, strength and abilities, to be able to observe and analyze what they see, to make correct, logically based conclusions and conclusions. to be able to learn a number of valuable skills and competencies from various sources (environment, experience, books, various instructions) in relation to general education, to be able to use some of the simplest tools (compass, thermometer, flywheel,...), some it is necessary to be able to prepare models, models, herbariums, to write and orally record their observations and summarize them.

"Natural sciences" help to create basic knowledge and skills in environmental protection. Because in these classes, students need to develop the concepts of studying nature, using it correctly, changing it and protecting it[24]. First, to teach them to see the beauty in nature for the growth of independent observation, voluntary attention and enthusiasm in students, and secondly, to set specific goals for observations, to set a plan for observations and it is necessary to bring to mind the importance of the conducted work in solving this or that educational task.

One of the main tasks of the teacher is to choose educational technologies that serve to rapidly teach natural-scientific knowledge at each stage of applying a creative approach to the formation of ecological concepts in elementary school students. On the basis of a creative approach, elementary school students are required to choose specific forms of improvement of natural-scientific knowledge[6].

Special educational materials, quizzes, illustrations, audio-video in connection with the topics of the program in order to teach students natural knowledge based on a creative approach to improving the teaching methodology based on developmental education. , they should also choose multimedia tools. In order to strengthen students' competence in science, teachers should select and implement a system of special exercises in the educational process in addition to textbooks[18]. In this case, the fruitfulness of the educational tasks, their relevance to the reality in the environment, visuality, brightness and variety are also important. Another important aspect is to determine the effectiveness of natural and scientific knowledge provided to elementary school students.

Pedagogical activity is carried out, which

consists in controlling, determining and evaluating the level of formation of acquired knowledge, skills, qualifications and competencies. It is recommended to use test tasks and practical exercises to determine and diagnose the level of formation of basic and subject-related competences formed on the basis of the improvement of the teaching methodology based on the developmental education of elementary school classes.

Therefore, while preparing for the lesson, the teacher first defines its goals. It clearly describes the topic, content, form, methods and tools of the lesson in accordance with the objectives of the lesson. In addition, in order to increase the effectiveness of the lesson, it is necessary to include educational materials not included in the textbook, poems, artistic fragments, folk proverbs, proverbs, riddles and other interesting information that arouse interest, revitalization and excitement in the students[7].

Mother tongue and reading literacy classes to observe natural phenomena also provide rich and interesting information to develop speaking and writing skills. Also, students should be connected with the natural phenomena presented in the works of art that they get to know not only in the classes of mother tongue and reading literacy, but also in related activities outside the classroom[9].

Observations and practical work of students in "Natural Sciences" are also related to mathematics lessons. In it, acquaintance with the shape of the Earth and its diurnal and annual cycle, along with providing students with the first understanding of the laws of day and night, seasons of the year, in accordance with their age, the diversity of the nature of the world, the certain consistency of nature's components from south to north allows them to explain the reasons for the distribution[19].

Pupils get acquainted with some types of local flora and fauna in nature, on trips to an agricultural production enterprise, in an educational experimental garden. In this process, the importance of nature for human life is emphasized in the lesson on the topic, the interaction between human labor and natural conditions is revealed.

It should be noted that childhood is the first carefree stage of human life. Children have an emotional-emotional approach to understanding the environment and the events taking place in it. As a result of this, a personal view, quality and independent attitude representing the essence of events is gradually formed in them and remains in their psyche[5].

CONCLUSION.

Taking into account the strong educational potential of nature, organizing a trip to the heart of



nature in family cooperation, in turn, improves students' observation, aesthetic enjoyment of the surrounding natural environment, a sense of empathy, the rules and manners of how to behave in the heart of nature. helps to form, their healthy, spiritual and intellectual development[10].

Children, on the other hand, learn from the actions and attitudes of adults. they should strive to ensure its stability. It is necessary to turn the rule "a clean environment is a healthy living environment" into a family's lifestyle and worldview, daily necessities, practical skills and vital needs[20].

When forming the first rules of a healthy lifestyle in a child, parents should diligently teach, relying on life examples, that it is the legal and human duty of each of us to protect the environment, keep it clean, not to pollute water, air and soil, and to use them sparingly. In primary education, students should acquire basic knowledge about animate and inanimate nature, as well as educate them in the spirit of love for the motherland, inculcate in their minds that the individual and nature are independent values, the importance and place of man in nature. , basic qualities aimed at keeping water, soil and air clean, understanding the beauty of the environment are formed.

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