

## **BRIEF HISTORY OF PROBLEMS AND DEVELOPMENT OF METHODS OF TEACHING NATURAL SCIENCE IN PRIMARY GRADE**

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**Summary:** The article discusses how to increase the interest of primary school students in nature, love nature, its conservation and problems, as well as a brief history of natural science.

**Keywords:** brief history of science, natural science education, methods of teaching science in primary school, problems and development of science teaching.

The history of methodology introduces teachers and methodologies to the range of problems that the predecessors of the current generation worked on. The most important thing is not to forget the main historical connection, in each case it is necessary to look at how a certain phenomenon in history arose, what main stages this phenomenon went through in its development, and how these things have become now in terms of this development. Knowledge of history prevents the repetition of mistakes, known discoveries. It allows us to use the valuable achievements of the past in solving and researching methodological problems that are considered the most necessary for our time.

The history of the methodology of teaching nature reveals the main problems that it solves to a certain extent; the content of education, teaching methods and their educational impact have always been. The introduction of a particular subject in school; its scope, ideological orientation were determined by the state, which often depended on their creative initiative. The content of the educational material was influenced by the state of natural science. The methodology of nature in our country is old and has a two-hundred-year history. Many biologists, methodologists and teachers participated in its creation, and many methodological manuals and textbooks created in various social conditions are their property. The history of the development of the methodology of nature education is divided into two main periods: the pre-revolutionary period - the tsarist state - a capitalist - economic, class society and the socialist classless society.

In the 8th century, no subject about nature was taught in ancient Russian schools. They were taught to read and write from the temple books and sing the temple song. At the end of the 18th century, nature education was introduced in Russian schools.

The country needed literate people to use natural resources and develop the economy, and therefore the government of Catherine II was forced to open public schools ("main 5-year and "small" - 2-year") and teacher seminaries. For the first time, nature education began in public schools and teacher seminaries. Academician Vasily Fyodorovich Zuev was involved in the creation of a textbook on nature, teaching at the educational institution and giving lectures at the teacher's seminary.

V.F. Zuev defines the sequence of teaching nature in the textbook as follows: The world of fossils (dead nature), the world of plants (botany), the world of animals (zoology). V.F. Zuev laid the foundation for the subject of nature education with his textbook. The textbook covers the description of some plants and animals, their biology, as well as their use by humans.

Along with solving practical problems related to teaching "Natural History", V.F. Zuev began to solve such extremely important issues of the methodology as the system of science and the

subject of study, scientific consistency and content, its presentation in simple language, the role of natural and pictorial visualization, the conscious development of students' knowledge, the practical role of natural history education.

Thus, at the end of the 18th century, Academician Vasily Fyodorovich Zuevms initiated the methodology of nature education and is truly considered its founder. In 1804-1873, the "Methodology of Nature" was first written in the 1840s in Germany by the teacher August Luben. Like the outstanding Czech pedagogue J.A. Comenius, A. Luben believed that teaching nature should proceed from the simple to the complex, from the known to the unknown, from the concrete to the abstract, that is, inductively. In his methodology, he recommends paying special attention to the following in the study: the diversity of plant forms; to recognize the unity underlying this diversity; to know plant life; to know the substances and forces that create the diversity of plant life forms.

In the first decade of the 20th century, the problems of choosing and interpreting the content of the subject of study also began to arise. The problem of content posed the problem of educating the worldview. Physiology developed successfully in science. The science of ecology emerged.

In his report on the "Tasks of the Subject in Secondary School" by the Methodist naturalist Valerian Viktorovich Polovtsev, the question "Why is it necessary to teach nature?" was raised and its following great educational significance was indicated:

1. Understanding the phenomena of the external world;
2. Understanding the directions of one's own organism;
3. The development of the sensory organs as the most important factors determining our mental development;
4. The regulation of thinking methods is a broader and more general development;
5. Expanding the circle of spiritual needs of the student and at the same time developing his moral personality; [2. p. 37]

Teaching natural science as a separate subject begins in the 3rd grade. The teaching material is combined into the topics "Nature and Man", "Natural Bodies", "Plants and Animals", "We Preserve Our Health" and "Ecology". The natural history program allows junior schoolchildren to show not only the beauty and wealth of nature, but also the nature of our republic, which is developing in fraternal cooperation with all peoples. A wide range of knowledge about the nature of their homeland and the labor of its people obliges the teacher to fulfill the most important educational tasks that constitute the main directions of the reform of general education and vocational schools. In the 3rd grade, students continue to regularly observe the weather, determine cloudiness, wind strength (strong, weak, moderate). They continue to conduct phenological observations: determine the length of the day (according to the calendar), yellowing of leaves, autumn, the state of plants and animals by season. In studying the topic "Natural Bodies", children learn about local representatives of the flora and fauna, the shapes of the surface of their area, water bodies and the properties of water, soil, and minerals through observation, experiments, excursions, and practical work. For children, the concept of "Our Country" is, first of all, the location of their homes and schools, because they are especially familiar with the soil, plants, animals, landforms, water bodies, and minerals that they can directly observe in the surrounding area. Children get acquainted with the soil on an excursion, examine soil sections. The teacher draws their attention to the layers of soil and the bedrock beneath the ground. In the process of practical work and experiments, students learn about the

composition of the soil and form an idea of the diversity of the soils of their region. Teaching natural science as a separate subject continues in the 4th grade. The educational material combines such materials as “Nature around us”, “Geographical map”, “Earth - a planet in the solar system”, “Uzbekistan on the globe and world map”, “Diversity of nature”, “We preserve the nature of Uzbekistan”, “Minerals”, “Nature protection”. When starting to study the topic “Nature around us”, children complete summer assignments, repeat the material about the nature of their native land and receive information about living nature, its main features, and the climate of our native land. Then they get acquainted with the topic “Geographical map”. This topic serves as the basis for students to understand the geographical map. Based on the study of their own place, the teacher forms initial ideas in students about the natural map of Uzbekistan, and then about the natural map of the CIS. Working with maps continues throughout the school year. Students should be introduced to the symbols used on maps and compared with the corresponding images of the nature of their region. It is necessary to strive for this so that the map becomes a source of knowledge for the child, like a book. [1. p. 215]

Working with textbooks plays a key role in the lesson of natural science. Basically, it is used to review the materials covered in textbooks and consolidate knowledge. In particular, working with models depends on the children's observation of the issues being considered and their life experience. When studying several objects in a particular class, sections about these objects can be used as basic knowledge. The main task of the lesson of natural science is for students to consolidate their basic knowledge using various methods and understand them deeply. The method of observation and summarization of results in lessons also remains the basis of lessons in the 3rd grade. The increase in tasks due to observation and the comparison of these observations over time increases the demand for independence in students. In addition, in the 3rd grade, the task of observing natural conditions, seasonal conditions is given, therefore, it is necessary to keep a “Diary of Observations of the Past Year” and a final table. A specific methodological guide to the organization and implementation of this work is given in the section “Seasonal Changes in Nature”. [3. p. 219]

The development of independent thinking of students as an element of education was highlighted as a result of special studies. Thus, naturalists and biologists of the last century made a significant contribution to the development of science with their views, the three main elements of the development of biology - content, methods and education, in recent years, the laws of the joint development of concepts, methods and education have been identified. The theoretical and practical work of biologists and naturalists in science, as well as the development of this science, has also influenced the development of special natural science, as textbooks are designed for schoolchildren.

**Reference:**

1. Nuriddinova M.I “Tabiatshunoslikni o‘qitish metodikasi” Cholpon nomidagi nashriyot-matbaa ijodiy uyi. Toshkent - 2005
2. Po‘latova X.M “Tabiatshunoslikni o‘qitish maxsus metodikasi” O‘zbekiston Yozuvchilar uyushmasi adabiyot jamg‘armasi, Toshkent -2006
3. Pulatova X.M, Sultanova D.M, Mamarajabova Z.N, “Tabiatshunoslikni o‘qitish maxsus metodikasi” «Sano-standart» nashriyoti Toshkent-2014