



## ORGANIZATION OF PRACTICAL WORK IN THE PROCESS OF NATURAL SCIENCES IN PRIMARY SCHOOLS

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<https://doi.org/10.5281/zenodo.7502832>

**Abstract:** The article reflects on effective methods familiarization of students at the lessons of natural history and extracurricular activities organization and implementation of practical work

**Keywords:** Practical methods, receptor, experiment, object, operation, excursion, herbarium, granite, aquarium, terrarium

Along with theoretical knowledge, practice plays an important role in the formation of young professional qualities of students. Natural scientific knowledge has been acquired for many years due to practical activities. Scientific experience and practical knowledge have been and continue to play an important role in knowing and understanding the environment. It is known that natural science is a science that studies the wide-ranging material world, various features of nature, and is formed on the basis of scientific experience, and practice is the foundation of this science. The practical activity of mankind based on the knowledge of the laws of nature determines the process of knowledge, the progress of science. Practice is the criterion of truth. The need for knowledge arises in practice, and their correctness is checked and confirmed through practice.

Knowledge does not appear in people's brain little by little, but is formed in certain work activities. Practice is the main factor in a person's relationship with nature, and this, in turn, plays an important role in the system of human relations and social production. The main types of practice are material production and scientific experience. Scientific - natural practice performs the following tasks.

1. Practice is a developmental factor of the cognitive process. He summarizes theoretical knowledge and does not allow them to be separated from life processes.
2. Practice is the order, application and goal of knowledge.
3. Practice is a criterion that shows that the process of knowing is real.

Practice in science is the main factor of scientific production. Practice leads to the emergence, scientific formation and development of theory.

The accuracy of knowledge is confirmed by the truth of information about a specific object. At the same time, if the circumstances are different, the reality may be different. For example, water boils at 100°C under normal conditions and pressure. But if the pressure changes or there is heavy water, it is concrete.

The reality in a given system may change completely in other conditions. Confirmation of the idea in practice is the main factor of truth. It is advisable to start training for practical work from primary grades. Practical methods are organized and directed by the teacher, and are aimed at developing students' thinking, showing that there is a complex connection between speech, demonstration and practical work.

The use of practical methods is related to the intensive activity of receptors and effectors of students. Practical methods provide an opportunity to deeply understand the studied material, to develop skills and competencies. The activity of students is the source of knowledge for the application of practical methods. Such methods include oral and written exercises, laboratory work, activities performed outside the classroom, on the school grounds, in the corner of living nature.

Types of practical methods:

1. *Pupils making different things with the distributed didactic material.*
2. *Drawing.*
3. *Works on recognition and identification of natural objects.*
4. *Observation and recording of events.*
5. *Experiments (experimental problem-solving) are included.*

Students should answer the question, problem, and issue with their results before the beginning of the practical work. Natural science classes are a type of practical methods of recognition and identification, which teach the characteristics of distinguishing and recognizing common plants or their parts. Going to the difference in comparison develops the student's ability to identify. The work on differentiation and identification is not carried out only in the classes, the teacher also helps the students to find and collect plants, collect samples, their age, vegetative methods, soil cross sections, adaptations, variability during nature excursions. should be selected based on their ability to learn. Pupils do work on learning the shape of plants and their parts as homework. The age of plants can be determined in nature not only by annual rings, but also by annual branching of plants. The plant has a growth period from spring to autumn, and a rest period from autumn to spring. This means one year of planting, in the second year again growth and branching occurs. The distance between branches is the age of the wire, which should be explained to students in nature. Students will gain practical knowledge and learn that it is possible to determine the age of trees even without cutting them. It forms ecological and scientific concepts.

In the field of natural science teaching methods, practical work plays a major role in acquiring knowledge about nature. Practical work is a method of training students in various labor operations in the course of their work. Practical activities include collecting natural materials during excursions, taking care of plants in front of the school and living nature corner, making herbariums and collections, preparing mock-ups, models, and visual aids.

Starting from the first grade, students learn by direct observation while reading the textbook "The world around us". In these activities, various equipments are used to help organize students' thinking activities, and first of all, visual aids. Visual aids include natural or real objects.

Natural weapons are natural objects. They allow children to understand the nature of the subjects being studied. Because in the classroom there can be various indoor plants and branches, leaves, flowers, fruits and seeds typical for the trees of their place to study living nature. Natural science lessons use plants grown in nature, as well as plants brought from the herbarium and excursions. Natural objects can also be used to study animals.

Although many animals can be shown to children in the classroom (in the corner of living nature), it is necessary to give preference to excursions, because in this the students will have the opportunity to get acquainted not only with their appearance, but also with their

behavior. In the absence of live animals, their chuchelas (suits), puppets, or photos and pictures of them can be used. In the study of inanimate nature, natural distribution material, for example, granite of various colors, quartz, feldspar, clay, sand, calcite (chalk, marble, lime, samples of various coal, iron, copper ores, as well as metals and alloys) can be iron, cast iron, steel, aluminum, soil samples, etc. Shown weapons are used to create clear and correct ideas about natural objects and phenomena that cannot be directly perceived by students. It is possible to use wall pictures of local history in natural science. They help to form ideas and concepts about local history objects of nature. In classes, it is necessary to use "Observation diaries" with printed pictures, texts representing them, questions and assignments for students.

Drawing maps and diagrams plays an important role in the practical learning of science materials. In order to use them (determining the sides of the horizon), the first step is to draw a simple picture of the location of objects in the school yard. It is convenient to use map schemes to check students' mastery of cartographic images.

In order to test students' practical knowledge, the following problematic questions can be asked in the 4th grade. You are standing in the desert in the heat of summer. Based on your practical knowledge of observation, take a landmark from where you stand and determine the south direction. As a result of practical observation of nature, the south can be determined based on the following factors:

- 1) reptiles always face the entrance to their nest to the south;
- 2) birds always place their nests in the south direction;
- 3) the branches of plants are always bent towards the south;
- 4) the south side of the plant stem is always fertile;
- 5) one end of the sand bar lies in the north and the other end lies in the south.

He gives the students various objects, takes out pictures, photographs, and matchboxes, cubes, glasses, and asks them to find the similarities and differences, then distributes geometric figures, which the students put on a sheet of notebook paper and circle around them with a pencil. they draw on paper. After completing the task, it leads to the conclusion that the top view of the object is called a plan. After that, the plan of the table is drawn. If the students have difficulty with the size of the objects, he explains that the depicted object can be conditionally reduced in size.

In programmed teaching, the activity and independence of students in the use of educational material increases, the possibility of individualizing the teaching process appears, teaching with technical tools is widely used, rational organization of teaching and student work is achieved. The principle of programming the control works is to write the students' oral answers with conditional signs and lines. Their advantage is that they can determine the mastery level of each student in a short period of time. The experience shows the advantages of using programmed teaching methods in order to activate the activity of learning in the lessons of acquaintance with the world. The advantage of these methods is that the students themselves can check the mastery of the educational material during the lesson.

The elementary school teacher should take into account the climatic conditions, the location of the school and agree on all issues with the biology student while organizing the work on the training ground. The experiment is the basis of agricultural experiences and additional

practical work of a young naturalist: because there he grows plants that are studied in natural science classes.

Starting from the primary grade, they study their country, their place, observe nature, and go on excursions. During their studies in primary school, they collect rich concrete material and this material is placed in the corner of local studies. Over time, the most valuable materials from the previous graduates of the primary school will be collected in the local history corner, which will be systematically used in the teaching of natural science. Local history corner is established in the science room or in a separate class. The material is divided into three sections: our country, weather and signs of nature.

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