

## DEMONSTRATIVE METHODS OF TEACHING NATURAL SCIENCES

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### ABSTRACT

*The use of visual aids in the learning process is especially important for the thorough acquisition of knowledge. They expand and improve when combined with the principle of demonstration in the educational process. The role of the demonstration method in the learning process is unique, which ensures the effectiveness of the lesson. It is known that the exhibition tools are used in the educational process for various didactic purposes, in particular, as a teaching aid, as a methodical manual, as a means of stimulating thinking in practical work, enhancing the ability to learn orally.*

**KEYWORDS:** *Demonstration Method Description; Difference From The Visual Principle; Types Of Visual Methods: Groups Of Visual Aids; Experiments, Their Essence; The Importance Of The Visual Method.*

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### INTRODUCTION

The role of the demonstration method in the learning process is unique, which ensures the effectiveness of the lesson. It is known that the exhibition tools are used in the educational process for various didactic purposes, in particular, as a teaching aid, as a methodical manual, as a means of stimulating thinking in practical work, enhancing the ability to learn orally. warms up. The task of the visual method is different, in the process of learning, students look at, observe and comprehend objects, with the help of sensory organs acquire certain information about physical processes, think about them by comparing them and finding their distinctive features. , on the basis of which certain knowledge is formed, which is then processed through words, demonstrations and explanations, they think.

Demonstrative method is defined by the fact that the aim is to gain new knowledge based on their application. In this process, informational texts from educational films, slides and slides (pictured below) serve as a source of knowledge for the acquisition of new knowledge. In most science classes, natural objects and various pictures and tables or b. is displayed.

Students, in turn, think, analyze, and then draw conclusions based on the observation (finding) of the visual aids set by the teacher. In any case, the use of visual aids involves the active perception and thinking of children, so they are given the task of knowing clearly. It should include the observation, observation, and teaching of objects and processes.

Observation and training can be frontal, group, or individual. In science classes, a lot of attention is paid to the demonstration of natural objects. This not only gives children an idea of their size, shape, and other characteristics, but also speeds up and activates the learning process. Students will learn about the practical importance and protection of living plants and animals, as well as some representatives of herbarium tulum-chuchelas and mammals. Therefore, in preparation for the lesson, the teacher carefully separates the objects, keeping them in the fall so that they can be well represented. The main didactic requirement at this time is for students to consider all the signs and features of the object they are studying, i.e., to love them.

For this purpose, the object to be displayed should be placed on a special table in the middle and there should be enough light around it. To do this, use a table lamp or other lamp. Smaller objects should be shown by the teacher walking between the desks. The main type of demonstration method is observation. Observation is a planned, purposeful, conscious perception of the being, body, and events around it. There are 2 characters in the tracking. A clear goal must be set and the focus must be on the object.

The teacher should organize the observation and mobilize the children to it, highlighting the important features of the observed objects. Students try to identify the characteristics of the object being observed. For example, children compare maple and maple, their colors, identify their differences and common features: look at maple ash, maple, willow, poplar, sada pine fruits, see how they differ from each other, look at them, they determine what makes them different from each other, what makes their shape ring different, what color their shape is. By planting plant seeds in the pre-school area, children observe the development of plants as the seeds germinate and the first and second leaves form.

The importance of observation is that the observation of existence, comparison, identification of similarities and differences, helps to develop children's thinking attention and will to acquire worldly knowledge about their choices. There are two types of observations: short-term and long-term. Short-term observations last from a few minutes to 2-3 hours. This time is determined by being able to perceive or accept something. Many animals, such as turtles, snakes, frogs, dragonflies, butterflies, and birds, are observed in structure and movement. Long-term observations are time-consuming or intermittent, but include events that make up a continuous process.

In particular, changes in plant growth, leaf discoloration, flight or arrival of birds, and the period from seed germination to fruiting are observed and recorded, and the data collected are compared. , are generalized and certain conclusions are drawn from them. It helps to determine the causes of long-term withdrawal. Observations should be of a geographical nature. Demonstration tools play a key role in the implementation of the demonstration method.

Exhibits are divided into two groups, natural and visual. Natural display weapons are objects of nature. These include houseplants, tree branches, leaves, flowers, fruits, seeds, roots, herbariums, seed collections, bouquets, and fruit and vegetable preparations. In the case of animals, it is a collection of living specimens, owls, skeletons, and insects. (Models, models, paintings, wallpapers, wet preparations, etc.) Inanimate natural materials granite, quartz, feldspar, oil, sand, calcium, marble, lime, stone, salts, table salt, coal, iron, copper ores, soil, water.

Objects that children cannot directly see are conveyed through visual exhibits. They are sold in specialty stores. In particular, a special series of pictures for grades II-IV is a collection of pictures called "Pets", "Animal World", "Plants of our country". Models, models, pictures, screen guides, visual aids. Understands the relationship between objects and events through direct observation during training. For example, the activity of silkworms in the leaves and leaves of the buds teaches the processes of silk formation. Knowledge based on local observations is of practical importance to students. You do not want to be frustrated if you cannot get the right pitch so invest in a good capo. This will keep the students interested.

The content of science lessons is aimed at independent learning of students using visual aids. In the course of the lesson, the children review the visual aids, analyze their parts, compare them, and finally identify similarities and differences. Knowledge created with the help of visual and thinking activities is stored in the memory for a long time. At the same time, it increases the teacher's interest in learning so that students can easily acquire new knowledge.

The essence of the use of the visual method is that students use these exhibitions to create new knowledge about them, that is, about natural objects and phenomena. For example, depending on the nature of the plant world; On the basis of observations, the use of natural materials is formed to predict changes in the weather depending on the behavior of animals and plants, changes in nature.

Observations in grades 1-3 should be used in a variety of forms of learning activities such as homework assignments, field trips, wildlife corners, and homework assignments in independent study areas. Independent study of natural materials develops children's observation and attention. At this point, the teacher should provide a complete plan of the observation and show how to identify the signs and characteristics of the object being studied. The map also plays an important role in the development of observation, the conditional cartographic symbols are gradually mastered on the basis of travel games on the map, the study.

Grade 3 students complete the Nature and Labor Calendar as a result of observing the nature in which they live and the labor of people. This is important for studying changes in nature. Demonstration-based lessons also focus on short-term, engaging experiences that engage children.

The experience is fun for students and an effective way to explore the environment. It plays a key role in promoting small, short-term experiences. It has a special place in the development of logical thinking and speech, in revealing the important secrets of nature. As a result, children gain new knowledge.

In short, the organization of lessons in a visual way, the color of the world in different shapes, sizes, colors, feeling the cause and effect of the interdependence of realities, perception, fact-based thinking, conclusions output, on this basis, plays a significant role in solving the task of acquiring secular knowledge. For example, to determine which type of food a dog will age, 3 pieces of paper are wrapped in 3 different foods, bread, meat, and candy. Which paper is faster in front of the dog? It is determined and a conclusion is drawn.

Test questions for students:

1. What activities of the student are activated by the practical organization of the learning process?

- A) Active learning; B) Strengthening cognitive activity;
- C) Observation, perception of objects; D) Independence and creative thinking;
- E) Analyze and draw conclusions;

2. Show the line that correctly describes the types of applied methods?

- 1. Identify and describe living things;
- 2. Figurative stories; 3. Observation of objects;
- 4. Laboratory experiments;
- 5. Drawing pictures;
- 6. Work on the literature;
- 7. Practical work in the field of training and experiments.

A) 2,1,3

B) 4,4,7

S) 3,4,5

D) 4,5,6

E) 3,2,7

3. The difference between experience and observation .....

- A) Purposeful, planned perception of objects
- B) As a result of the experiment, news is discovered in science
- C) It is to reveal the inner, important secrets of the world
- D) Violation of the laws of the body by influencing its internal processes
- E) S.D. The answers are correct

4. What types of practical work are carried out in the corner of wildlife?

- A) Animal care
- B) Conduct experiments
- C) Observations
- D) Plant care
- E) All the answers are correct

5. Identify the types of practical work on the training site?

- 1. Plant care; 2. Washing plants; 3. Fertilization; 4. Irrigation of plants; 5. Shaping plants; 6. Harvesting; 7. Tracking.

A) 2,4,3,5

B) 4,6,3,7

S) 3,1,7

D) 1,5,4,6

E) 1,3,2,5

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