



The Role and Importance of the Organization of Educational Projects in the Teaching of Natural Sciences in General Education Schools

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Abstract: The article discusses the methodology of organizing educational projects, which is one of the most optimal ways to develop personal intellectual and creative abilities of students in the teaching of natural sciences in secondary schools.

Key words: Project work, research projects, express projects, types of projects.

In today's education system reforms in our society, experts are required not only to have knowledge, but also to have inquisitiveness, inventiveness, and entrepreneurship skills. Therefore, the development of students' (logical, creative, critical) thinking and research abilities by involving them in educational project activities should be considered as one of the urgent pedagogical problems. In this place, a number of scientists of our Republic studied the issues of involving students in practical, that is, educational and research activities based on the competence approach in education. Based on the principle of using educational technologies focused on the personality of the student by means of experiments, it is recognized that it is an effective way to develop research skills in them. Ensuring the effectiveness of education is a comprehensive didactic process. It also has its own logical basis in terms of organizing and implementing new forms of education (such as curriculum, study and research) in the content renewal of education. psychological-pedagogical and philosophical aspects are considered as one of the problems that need to be solved methodically.

In today's education system, it is important to use methods that form the skills of students to independently search for new knowledge, acquire it, collect necessary information, put forward hypotheses, come to a certain opinion, and draw a final conclusion.

Practical activities of students in natural sciences:

1. Long-term educational projects (research projects).
2. One-hour projects (practical exercises)
3. Express projects (small practical works)

The essence, types, stages of educational project work

The main idea of project work is to achieve the intended result in the process of solving a problem of practical or theoretical importance.

The main thesis of the project work is: "I know why I need the learned knowledge and skills and where and how to use them."



This thesis helps students to consciously master the basics of science, adapt to life and get the goal right.

Project types	
Research projects based on the predominance of activities	provided for in the project.
	Creative projects.
	Role projects.
	Practical projects
According to the subject and content of the projects:	Projects requiring interdisciplinary research
	Projects covering one discipline
According to the number of participants in the project:	Individual projects
	Students work in small groups
	To conduct on a class or school scale intended projects
By duration:	Short-term
	Long term

Stages of educational project work:

1. Determination of project category, topic and number of participants;
2. Determination of the project problem, subject, tasks
3. Compile assignments for project participants and distribute them among members;
4. Organization of students' independent research on the project;
5. Determination of expected results from the project;
6. Completion, evaluation and conclusion of project work.

Project work "Planting and caring for plants" in the 1st grade natural science curriculum.

Topic 7: Planting and care of plants.

Purpose: to learn what is necessary for the growth and development of plants, to plant and care for plants, to observe their development.

We need; porous stone (keramsite), garden soil, rooted plant, peat, spade, gultuvak, biofertilizer, water container.

Work progress:

1. Soil, biofertilizer, peat are mixed.
2. Porous stone is placed in the pot.
3. The pot is filled half way with the soil mixture.
4. The rooted plant is placed in the pot.
5. The root of the plant in Gultuvak is buried with soil.
6. The soil around the plant is compacted by hand.
7. Water is poured into the plant.



Students will be given the following tasks in connection with the project work.

Take care of the plant and watch its development. Record the changes occurring in the plant in the table.

Month	November	December	January	February	March	April
Number of leaves, ta						
Length, cm						

Students will develop the following skills during the implementation of educational projects.

- understanding the problem
- looking for ways to solve the problem
- use of previously acquired knowledge
- predict outcomes
- development of different solution options

In conclusion, it should be emphasized that one of the most optimal ways to develop personal intellectual and creative abilities of students in teaching natural sciences in general education schools is to develop them with educational projects and educational-research activities. is to organize their activities. Therefore, this activity is an important integral part of the educational process.

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