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## CONTENT OF EXPERIMENTAL ASSIGNMENTS AT HOME AND HOME EXPERIMENTS IN THE EDUCATIONAL PROCESS

## Dilfuza Tulegenova\*

\*Student, YEOJU Technical Institute, Tashkent, UZBEKISTAN Email id: karimkulov@mail.ru

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#### ABSTRACT

In the educational system of our country, positive reforms are being implemented to increase the interest of students in learning the basics of science, to raise the quality of education to the level of global requirements.

**KEYWORDS:** Science and Education, Positive Reforms, Learning, Quality of Education, Development.

#### INTRODUCTION

At the same time, there is a need to develop tasks with practical content in improving the content of methodological support of chemical education. In the Strategy of Actions for the further development of the Republic of Uzbekistan, "fundamental improvement of the quality of general secondary education, in-depth study of foreign languages, informatics and other important and high-demand subjects such as mathematics, physics, chemistry, biology"1 is defined as a priority task. In this regard, it is important to integrate the content of chemistry and basic concepts of natural sciences, to improve students' practical work skills.

A number of scientific researchers have been conducted in our republic, Commonwealth countries and foreign countries on the improvement of the education system, effective development of students' knowledge, skills and abilities.For example: B.Ziyomukhammadov, N.N.Azizkhodjaeva, N.S.Saidakhmedov, H.T.Omonov, researchers Sh.Sh.Begmatov, E.U.Zakinov, E.U.Eshchanov in the field of improving the educational process in our republic modern educational methods, methods of effective use of independent work in the educational process and extracurricular activities, didactic games, organization of extracurricular activities based on information about the practical importance of chemistry, psychological scientistsP.I.Ivanov, M.E.Zufarova, E.G'oziev, A.Jabborov on the laws of psychological development of students, their character, abilities, external influences in the educational process, internal and external motivations, their stability, voluntary and involuntary memory in increasing educational efficiency conducted research.

In the countries of the Commonwealth of Independent States, V.V. Guzeev, O.S.Zaitsev, G.K.Selevko, G.M.Chernobelskaya researched various traditional and modern methods aimed at increasing educational efficiency, types and forms of independent work and their place in the educational process. In the development of students' experimental skills, the works of I.P.Balaev, M.P.Rudenko, T.A.Shipareva covered the scientific and methodological bases of solving

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experimental problems at home and organizing the implementation of experiments, their implementation.New experiments are not being developed for demonstration, laboratory work and practical training. As an exception, Yu.V. An experiment developed by Surin can be cited. The researcher has been engaged in problem demonstration experiments for many years. Yu.V. Surin has developed more than 70 problem-based research experiments on many topics of the school curriculum. The practical implementation of his experiments is fundamentally different from the experiments that have become classics (the experiments of K.Ya.Parmenov, B.C.Polosin and others).

"The state of the problem of organizing students' experiments at home in the modern educational process" in which the content of experimental tasks at home and the methodological aspects of using home experiments and observations in the educational process are not sufficiently covered in the methodological literature on modern chemistry, the analysis of scientific and methodological literature on this issue in the last 20 years conducted.

Home experience can be called individual practical work, which is one of the types of independent homework that is mandatory for all students. It is carried out using household substances and objects, is carried out through the mediation of the teacher and assumes some control from him.

#### HOME EXPERIENCES HAVE MANY POSSIBILITIES.

Table 1

Multifunctional possibilities of home experience Home experience tasks			The main tasks of home experiments	
Motivational	-		arousing curiosity, the pleasure of discovery, forming a positive attitude to academic subjects	
Developer			Development of experimental skills	

#### 2. Practical

A) development of attention, observation, improvement of mental actions, formation of skills to get out of the situation

B) coordination of movements, kinesthetic and gravitational feelings, speed of movement and manipulative mastery, development of automaticity in manual work

V) development of feeling and perception of external properties and changes of substances in the process of chemical reactions

3. *Creative initiative development* 

4. Develop thinking

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Educational	Conscious assimilation and strengthening of knowledge regarding the studied educational material Acquiring new knowledge, implementing the principle of connection between theory and practice, individualization			
Educational	Development of the skills of proper organization of work Forming the will to self-education			
Propedeutic	Preparation for understanding new material			
Reflexive	Understanding, analysis			

The main thing is the process of doing things, during which general education and experimental skills are formed. On the other hand, homework was considered as a kind of homework in comparison with them.

In addition to the requirements for home experiments, the following criteria for choosing an experimental work system at home are also distinguished:

- 1) Didactic principles;
- 2) Specific features of teaching science;
- 3) Independent learning activities;
- 4) Organizing an educational chemical experiment;
- 5) Characteristics of home experiences

These criteria complete the basic requirements for conducting experiments at home and developing a system of tasks of experimental description.

The teacher's tasks in organizing home experiments are as follows:

1) Planning future work.

The teacher's tasks in planning students' homework are as follows:

a) Allocation of materials for home study;

b) Choosing and determining the content, size, and estimated time for completing the experimental task and coordinating them with other types of homework on the subject;

c) Thinking about words, instructions, control questions for home experience; d) to create an indicative basis of actions to perform home experiment work.

2) Working with parents.

3) Assigning tasks to students is important in organizing experimental work at home.

# 4) Working with students.

The analyzes carried out taking into account chemical knowledge, skills and competencies based on the general knowledge acquired by students in the school level of chemical education showed that the percentage of "excellent" and "good" grades in the experimental classes of the 8th grade compared to the control classes increased by 19.9% (2 -table).

Dynamics of change of students' knowledge levels. Grade		Experience classes	Contr	Control classes	
In the initial st excellent	Last tage stage	In the	initial stage	Last stage	
In the initial stage excellent	24/22,5	39/36,4	22/23,4	27/28,7	
good	31/29	45/42	21/22,3	28/29,8	
satisfactory	45/42	21/19,6	43/45,7	36/38,3	
unsatisfied	7/6,5	2/2	8/8,6	3/3,2	

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Total	107	107	94	94						

Note: Interest in denominator

Work based on chemical experiments that students can perform at home can be seen to have an impact on the level of acquisition of practical skills.

Increasing interest in learning the basics of science on the basis of the above-mentioned recommendations will eventually lead to the education of young people who have a broad and deep outlook, who think independently with a comprehensive understanding of the practical importance of chemistry, who can use their knowledge and skills in various changed conditions, and who have an ecological culture. Plays an important role.

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