

## **A SET OF CASES, PRACTICAL ASSIGNMENTS, THE IMPORTANCE OF DEVELOPMENTS IN TEACHING THE SUBJECT "FUELS AND LUBRICANTS"**

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### **Abstract**

In this article, using innovative pedagogical technologies for teaching the subject "Fuels and lubricants" in higher education, each professor can change the method of teaching depending on the content, purpose, current conditions, opportunities and needs of students. on the basis of these technologies they can create their own copyright technologies and use them in the educational process.

**Keywords:** Research and innovation activities, Fergana resettlement, innovation, reproductive method, Innovative technologies, Collaborative learning, Electronic pedagogical textbook.

### **Introduction**

Today, in teaching the subject "Fuels and Lubricants" in higher education institutions are often used reproductive methods of education that do not develop students' creative potential, do not help them to develop skills in working with information and identifying, analyzing and systematizing its main content. The modern specialist is required not only to be knowledgeable in his field and to have information in this area, but also to be able to use them appropriately in various professional situations.

Along with other disciplines in higher education, the subject of "Fuels and Lubricants" has great potential for career guidance and the formation and development of their professional knowledge. In order to make effective use of these opportunities in the classroom, it is necessary to pay special attention to the fact that the content of the subject is designed in a way that is interesting for them, taking into account the age characteristics of students. To do this, we have to look for unconventional ways to enhance students' interests and creativity, giving up (stepping out) stereotypes that have hitherto taken on a dogmatic look when covering topics, creating graphic

exercises and assignments for students to do. Due to the nature of the science of "fuels and lubricants", we have a great opportunity to use such methods, methods and practical tasks.

Let's look at the following case on the subject of "Fuels and lubricants".

Statement of the problem.

The driver of the Termez-Tashkent route noticed a large amount of gas in the car's interior, which soon began to come out, and a powerful explosion occurred as a result of a fire in the car's engine. This caused damage to the driver's health and also led to atmospheric pollution. As a result of inspections of the process, it was found that the rubber-technical elements of the car's gas equipment were out of order. Is the conclusion given by the experts correct? What other factors can cause the failure of the rubber-technical elements of the car's gas equipment?

**Cases of case implementation**

Stages	Assignments
Phase 1	Get acquainted with the case. Pay special attention to the content of the problem situation. Determine what the problem situation is dedicated to solving.
Phase 2	Determine the chemical activity of the propylene and butylene olefin groups that make up liquefied propane-butane (petroleum) gas (SNG). Determine how such chemical activity affects the engine's supply system.
Phase 3	Determine the causes of damage to the rubber-technical elements of the car's gas equipment. They can be multiple. Identify the factor that caused the above condition and look for a solution to the problem. Justify the solution you find and explain with examples what exactly caused this situation.
Phase 4	Describe and present your opinion on the case solution in writing.

Assignment to solve the problem.

According to Keys, students complete the following assignments.

Oral presentation of the content of the project prepared by the student (group of students 3-4 students) and its specific features - up to 10 minutes.

Evaluation criteria.

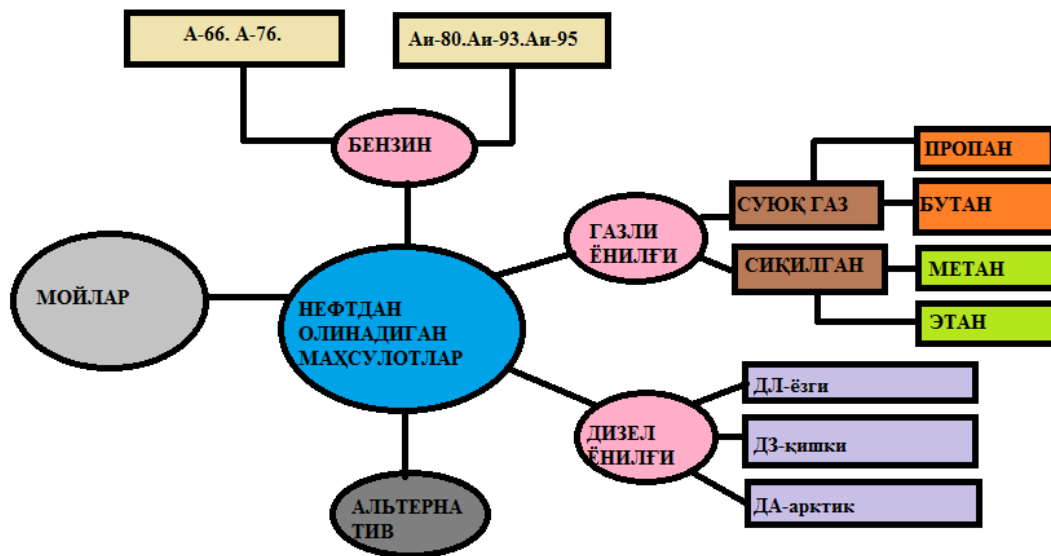
Individual work evaluation system.

Participants	Evaluation criteria			
	Knowledge of educational information on the topic (0-0.5)	Ability to analyze (0-0.5)	Ability to justify a solution (0-0.7)	Overall score (max ball 2) *
1				
2				
3				
4				

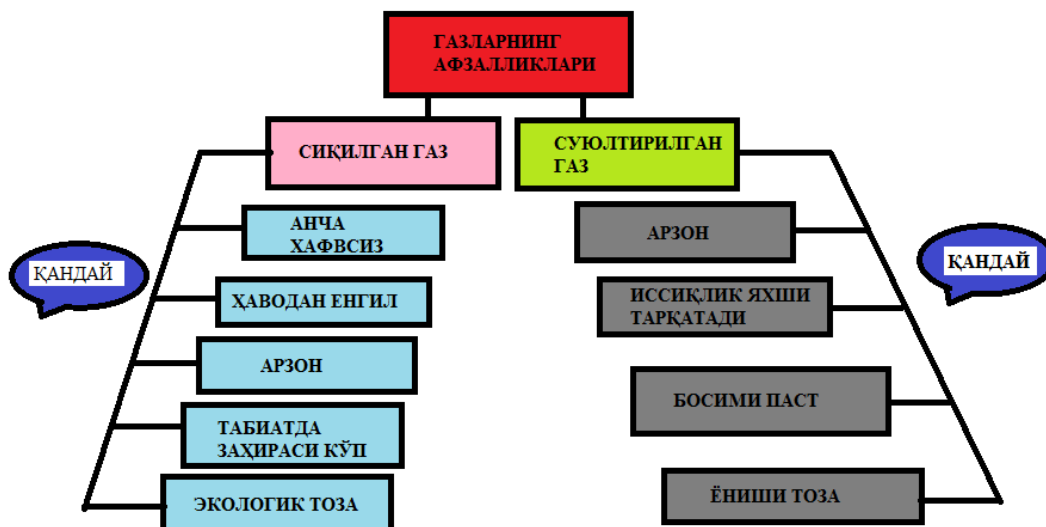
\* 1,6 - 2 points - "excellent"; 1.0 -1.5 points - "good"; 0.5 - 0.9 points - "satisfactory"; Less than 0.5 points - "unsatisfactory".

Used interactive methods (Graphic organizers)

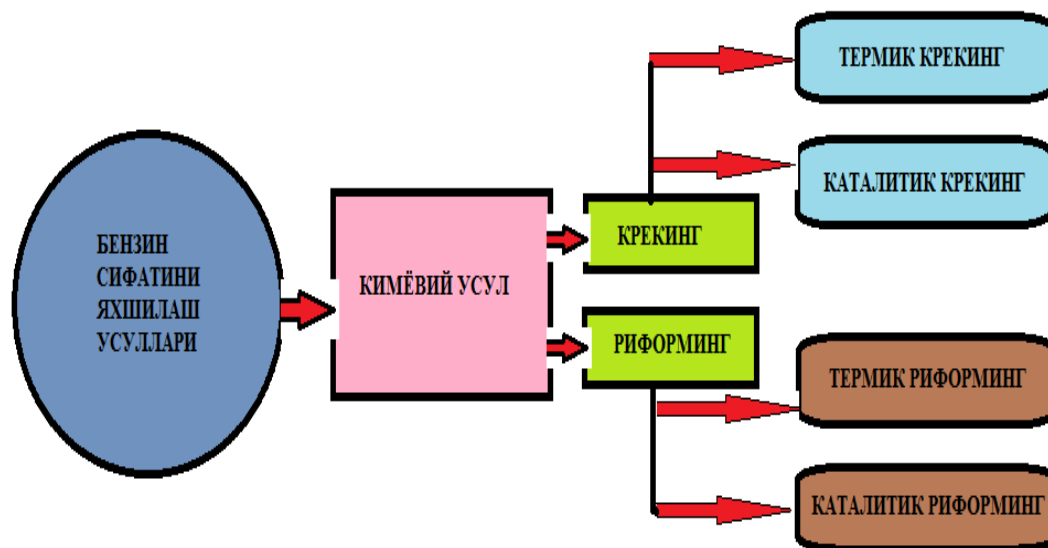
CLUSTER



STEP-TOP-TOP-STAGE "HOW" DIAGRAM



STRUCTURAL AND LOGICAL DRAWING "POGONA"



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