## FEATURES OF PROBLEM-BASED LEARNING IN FOREIGN LANGUAGE LESSONS.

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One of the varieties of innovative methods in education is problem-based learning, which is aimed at developing the creative abilities of pupils and their intellectual skills, in other words, at developing students' independence. The main idea of this approach is the construction of educational activity through mental activity, the solution of cognitive educational tasks or tasks that have empty spaces, insufficient conditions for receiving an answer. Problem-based learning is organized on the basis of problem issues, tasks and situations.

Problem-based learning is a system of teaching methods in which students acquire knowledge not by memorizing and keep in mind them in end form, but as a result of mental work to solve problems and problem tasks based on the content of the material being studied [1].

At present, the life of modern society is unthinkable without information, which is rapidly changing, losing its relevance and becoming obsolete. The goal of education and upbringing should be the ability of students to navigate the sources of modern information, find the necessary material and actively use it in teaching. This method of action in modern education is an activity approach, in which the student becomes an active subject of the educational process [2].

Modern education is embraced by innovative processes: annually changes and adjustments are made to the curriculum, new methods, methods and approaches in teaching are developed and tested. What is "innovation"? According to the definition of the large polytechnic dictionary, "innovation" is just an Englishlanguage term for the concept of "novation". Learning innovation must be a qualitative change, and that's the whole point of innovation.

Today, there are a variety of innovative ways of teaching. For example, project method, distance learning, modular learning, interactive, research, problem learning. Let's take a closer look at problem learning.

Problem-based teaching is a system of techniques that provide targeted actions of the teacher to organize the inclusion of the mechanisms of thinking and behavior of students by creating problem situations. In the process of problem-based learning, the teacher does not communicate ready-made knowledge (information), but poses a problem to the students and motivates them to resolve it. Problem-based learning is carried out in the following forms:

- a) problem presentation of the material by the teacher;
- b) partial search activity of students with the participation of a teacher;

c) independent research and solution of a problem situation, carried out by students under the guidance of a teacher when writing essays, term papers, projects.

The key concept of problem learning is a "problem situation", which includes a complex theoretical or practical issue that requires study, expansion, research in certain conditions and circumstances.

Problem-based learning is a specific system with content, goals, forms, methods and means of teaching.

Problem learning methods include:

- · research method
- · heuristic method
- method of problem statement

Here are examples of tasks implemented in the process of teaching English within the framework of this teaching material. Consider the "Guests at the Table" game, organized in the form of a group competition.

The task. Look at the slides representing different guests at the table. Tell what they eat and how they are dressed. The purpose of this task is to create conditions for interactive interaction between students for the implementation of game activities. With the help of this type of work, it seems possible to activate the studied lexical material, as well as to consolidate the new. Using the example of the following task, we can consider the possibilities of heuristic technologies in the development of students' grammatical skills. Children are invited to complete the task in the form of a team competition: Make as much as possible offers in the Future Simple Tense using words on cards, which also allows you to create conditions for interactive interaction between students and the implementation of game activities; activate the learned grammatical material. Consider this type of assignment, such as watching an animated film. Task: Discuss the cartoon "Baby elephant and his new clothes" This task provides an opportunity to develop creative and critical thinking skills by analyzing the watched video material. When organizing this type of work, we used such a heuristic method as the review method.

In view of the fact that the position of a foreign language in the world as a leading means of international communication increasingly is strengthening, and there are no significant tendencies to stop or slow down this process, the problem of using effective methods of teaching English is extremely important. The value of heuristic lessons in a foreign language lies in the fact that students independently acquire new knowledge, learn to apply it based on existing experience, the teacher only leads them to the correct solution. Heuristic learning in foreign language classes contributes to the formation of their point of view, their position, speech skills. According to

heuristic techniques, students are involved in interactive activities in the classroom, where the student is an active subject of activity in the lesson, and the educational process is given a real practical focus.

Research work not only gives the student the opportunity to develop research skills, but also replenishes the teacher's experience. With each year of joint work, the teacher not only moves forward in his pedagogical development, but also learns a lot of new and interesting things for himself.

A prerequisite for the development of students' creative abilities is the elimination of the dominant role of the teacher. The hardest part for a teacher is learning to be a consultant. It is difficult to resist the prompts. But it is important in the course of consultations only to answer the questions arising from schoolchildren.

The role of the teacher is different at different stages of the organization of research activities.

Stage I. Diagnostics. Identification of students predisposed to research work. The role of the teacher is dominant. The interaction between teacher and students is close.

Stage II. Determining the topic, goals, setting goals. At this stage, the teacher is already acting as a consultant. The teacher's role is not dominant.

Stage III. Completing of the work. The teacher is a consultant. The student is given maximum independence.

Stage IV. Protection (activity analysis). At this stage, the teacher and the student are equal partners.

The work begins by identifying students who have an inclination and desire to engage in research activities. Subject teachers and parents play an important role in this, because they know better than anyone the capabilities and aspirations of students and can help them with advice and deed. At the next stage, specific projects are determined, work managers are selected, who are school teachers. Based on the analysis of the activities of the scientific society of students, the following motives of students to engage in research work were identified: interest in the subject; desire to deepen your knowledge, broaden your horizons; connection with the future profession; satisfaction with the work process; desire to assert itself; receive an award at a competition; enter university; other.

The success of an activity largely depends on its clear organization. Under the guidance of the teacher, a schedule is drawn up for the implementation of the educational research: the time frame, the amount of work and the stages of its implementation are determined.

Problematic presentation - this is how didactics call such an introduction of new material, in the process of which a teacher or a textbook shows the way to solve a problem. Suppose you want to enter English words: accord, bizarre, collaboration, consist, constant, disposition, intervention, permanent, positive, proclamation.

First of all, in this list, students are invited to find words that remind them in sound or spelling of Russian words. These words usually include constant (constant, constant, constant value), positive (positive). In addition, the teacher can recall the Russian words

permanent and proclamation, which are easily associated with the English permanent and proclamation. This is how connections are established between Russian and new French words.

Next, students are introduced to examples of their use in speech (for example: This book consists of two parts). After identifying words that are close in meaning to Russian schoolchildren, it is proposed to find among them those lexical units that remind them of the English words already studied. So disposition with position. The use of new English words in the context allows you to clarify their meaning [3, p.54]. The word bizarre, explained in English in the process of their use in speech: You have used a bizarre method in this task, it's very interesting. Such a problematic presentation of new material not only arouses the interest of students, but also contributes to the creation of additional associations, and therefore improves the memorization of new words.

"Learning is a historically changing process. It changes depending on the level of industrial relations, depending on the needs of society, as well as social conditions, the spiritual wealth of society, its cultural traditions and level of education. Within a particular socio-economic formation, there have always been various types and types of education, from adopting the experience of elders through observation and imitation to the independent assimilation of new knowledge by solving practical or theoretical problems. " - Makhmudov.

Also, this great teacher believed that problem learning should become the main one in learning.

In our era, various teaching methods are used: problem, explanatory-illustrative, computer. However, the main condition remains - to convey knowledge to the learner as quickly and efficiently as possible [4].

It should also be noted that the techniques of problem learning, stimulating mental and speech activity, shaping the mechanisms of thinking of students and contributing to the achievement of developmental goals, must be used with even the level of training of students and their knowledge [5].

Problem-based teaching techniques are effective only if they are provided by the teacher in a timely manner. Both too easy and too difficult tasks are not able to stimulate productive thinking and, therefore, make learning developmental.

The method of problem learning differs from the traditional one in that it puts him in a position where he is forced to think actively and intensively, mobilizing his intellectual potential to solve a problem and form a theoretical conclusion. The theoretical conclusion obtained in an independent search is assimilated by the student as the fruit of his own labor.

Thus, problem-based learning in English lessons complements the traditional illustrative-explanatory teaching of schoolchildren. At the same time, it contributes to the destruction of old stereotypes of passive learning, forcing students to think, to search together with the teacher for answers to complex life questions.

Well, of course, like all methods, problem learning has its pros and cons. Pros:

-stimulates cognitive interest

- teaches to think independently
- -activates attention, memory, thinking, imagination
  - teaches to work in a team

Cons:

- time-consuming
- -is not used everywhere
- -it is not possible to apply problem learning at all stages of the lesson

## Literature:

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ТЕСТОВЫЕ ОБРАЗЦЫ, И МЕТОДЫ ИХ РЕШЕНИЯ, ИСПОЛЬЗУЕМЫЕ ГОСУДАРСТВЕННЫМ ЭКЗАМЕНАЦИОННЫМ ЦЕНТРОМ АЗЕРБАЙДЖАНСКОЙ РЕСПУБЛИКИ ПРИ ОЦЕНКЕ ЗНАНИЙ УЧЕНИКОВ ОДИННАДЦАТОГО КЛАССА ПО ТЕМЕ «СКОРОСТЬ ХИМИЧЕСКОЙ РЕАКЦИИ И ХИМИЧЕСКОЕ РАВНОВЕСИЕ»

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TEST SAMPLES AND METHODS FOR THEIR SOLUTION USED BY
THE STATE EXAMINATION CENTER OF AZERBAIJAN REPUBLIC IN ASSESSING THE
KNOWLEDGE OF ELEVENTH GRADE STUDENTS ON THE TOPIC
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## **РЕЗЮМЕ**

В статье разъясняются тестовые образцы, и методы их решения используемые Государственным экзаменационным центром Азербайджанской Республики при оценке знаний учеников по теме «Скорость химической реакции и химическое равновесие».

## ABSTRACT

In the article the test samples and their solution methods used by the State Examination Center of Azerbaijan Republic in the assessment of student's knowledge on the topic"The rate of chemical reaction and chemical equilibrium" are explained.

Государственный экзаменационный центр использует три типа тестов (простой; средний; сложный) для оценки знаний учащихся о скорости химических реакций и химическом равновесии. Каждый из этих типов составлен по степени релевантности на основе фактического материала, объяснения, обобщения, расчета, прогноза. Мы не будем приводить простые тестовые образцы по этой теме, а средние и сложные тестовые образцы.

**Задание 1.** В реакции  $N_2 + 3H_2 \xrightarrow{t} 2NH_3$ , если 2 моль  $N_2$  расходуется за 2 минуты, рассчитайте скорости реакции для азота, водорода и аммиака (в моль /  $n \cdot M$  мин). Объем реакционного сосуда 10 л.

Решение: Это тестовый образец промежуточного, вычислительного типа.

$$\vartheta_{
m N2} \! = \! rac{
u_{
m N2}}{{
m Vqab} \cdot \Delta au} \! = \! rac{16}{10 \cdot 2} \! = 0$$
,8 моль /л·мин

$$\vartheta_{\mathrm{H2}}=3\vartheta_{\mathrm{N2}}=0$$
,8 · 3 = 2,4 моль /л·мин

$$\vartheta_{\rm NH3} = 2\vartheta_{\rm N2} = 0.8 \cdot 2 = 1.6$$
 моль /л·мин

**Задание 2.** Определить соответствующие на диаграмме Эйлера-Венна.