

ОСОБЕННОСТИ РЕАЛИЗАЦИИ ЭВРИСТИЧЕСКИХ ИГР КАК СРЕДСТВА ФОРМИРОВАНИЯ МЕТАПРЕДМЕТНЫХ КОМПЕТЕНЦИЙ НА ПРИМЕРЕ ОБУЧЕНИЯ АНГЛИЙСКОМУ ЯЗЫКУ В 5 КЛАССЕ

PECULIARITIES OF THE IMPLEMENTATION OF HEURISTIC GAMES AS A MEANS OF FORMING META-SUBJECT COMPETENCES ON THE EXAMPLE OF TEACHING ENGLISH IN THE 5TH FORM

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В статье рассматривается эвристическая игра как средство формирования метапредметных компетенций учащихся (на примере обучения английскому языку в 5 классе). Показаны основные характеристики эвристической игры как синергии дидактических особенностей эвристического обучения и собственно игры. Приведено описание эксперимента, отражающего эффективность практического использования эвристических игр в обучении. Результаты эксперимента показывают, что регулярное применение эвристических игр на занятиях способствуют не только формированию метапредметных компетенций, но и положительно влияют на усвоение предметной составляющей обучения.

Ключевые слова: эвристическое обучение; эвристическая игра; дидактическая игра; метапредметные компетенции.

The article considers a heuristic game as a means of forming students' meta-subject competences (on the example of teaching English in the 5th form). The main characteristics of the heuristic game as a synergy of the didactic features of heuristic learning and the game itself are shown. The description of the experiment reflecting the effectiveness of the practical use of heuristic games in teaching is given. The results of the experiment show that the regular use of heuristic games in the classroom not only contributes to the formation of meta-subject competencies, but also has a positive effect on the subject component of education.

Keywords: heuristic learning; heuristic game; didactic game; meta-subject competences.

There has been a transition to a competency-based approach at different levels of education over the past few years in the educational space of the Republic of Belarus. First of all, this is due to the transformation of the requirements of the labor market, correlating with global trends towards acceleration, transformation and creation of new technologies, the

management of which becomes impossible without the possession of certain competencies. The document "The Concept for the Development of the Education System of the Republic of Belarus until 2030" notes the following global educational trends: "A consolidated idea has been formed that the goal of modern education is to help students acquire the competencies necessary for successful socialization and responsible human life, including making a professional choice. The competence approach in education is recognized as key". The formation of competencies is inextricably linked with the learning process. There is similarity in the methodological foundations of the competency-based and meta-subject approaches, which is confirmed by the scientific studies of A.G. Asmolov [5], U.V. Gromyko [1], A.V. Khutorskoy [3] and others. A.V. Khutorskoy identifies key competencies with meta-subject competencies and represents them as a component of the meta-subject content of education: "Meta-subject (key) competencies, which are norms, requirements for the preparation of students, which set a minimum level of their knowledge, skills, ways of activity; personal experience; social demand in relation to fundamental objects and problems" [4, p. 225]. Here it is worth clarifying that the competence-based approach can be called an activity-oriented general approach, the basis of which, within the framework of education, is the development of various competencies in students. The meta-subject approach is the content of education, which if properly applied allows to increase the effectiveness of educational results. In particular, further we will propose a heuristic game as a learning tool that allows you to effectively form the meta-subject competencies of students.

Didactic heuristics, the ideas of which are fundamental to our study, represents heuristic learning as learning through discovery, which aims to construct the student's own meaning, goals and content of education, as well as the process of its organization, diagnosis and awareness [4, p. 97]. The student gains the ability to create "his own" and compare "his own" with "someone else's". In this dialogue by means of an educational subject, the student discovers himself – his meanings, mission, looks at himself from the outside, determines who he is or is not. At the same time, there is an internal increment of cognitive, creative, organizational and activity qualities of the student's personality. So the student goes "the way to himself" – his moral principle [2, p. 46]. The game component emotionally fills this "path", providing motivation for continual movement along it. That is why we propose a heuristic game (a synthesis of didactic features of heuristic learning

and games) as one of the ways to form meta-subject competencies in students, direct them to self-change and self-realization.

The heuristic game, which is not a prescription, but a methodological principle, will have the following description. The process of a heuristic game is a component of a heuristic game, which is the interaction of students aimed at achieving the game goal. The situation of a heuristic game is a set of circumstances in the plot of a heuristic game. The heuristic game space is the simulated reality of the game.

Despite the fact that the heuristic game consists of two well-known "terms" – the game of didactic and heuristic learning ideas - we can say that its global value lies in its emergence. The heuristic game is not the sum of properties of its components, it acquires new properties and meanings, opening up new opportunities in learning. Let's take a practical example of how these possibilities manifest themselves.

To prove the effectiveness of the heuristic game as a means of forming meta-subject competencies within the framework of English classes, we are conducting a face-to-face experiment in which schoolchildren of the 5th form of a secondary school take part. The purpose of the experiment is to test the effectiveness of using heuristic games in teaching English to 5th form pupils. When organizing the experiment, the following tasks were set:

a) to develop tasks for entrance testing to identify the initial level of meta-subject competencies of students;

b) to develop and conduct heuristic games on topics of lessons;

c) to compare personal increments of students in two groups: experimental (learning using heuristic games) and control (using didactic games);

d) to develop and conduct testing, to compare the dynamics of the performance of each pupil.

In accordance with the curriculum of the English language course, we have developed heuristic games introduced into the educational process. When conducting a pedagogical experiment, the principle of comparability was observed, that is, the presence of equal conditions in terms of the volume of educational material, the duration of training sessions and the level of knowledge of the English language among students. The number of pupils in both groups was also the same and amounted to 10 people for each group. The duration of the experiment at the moment is 4 months, intermediate results are revealed.

The experiment has a prolonged basis and will continue until the end of the academic year, then a final test will be held to determine the annual results.

In the experimental group heuristic games were realized, the control group studied with a textbook. The results achieved by the pupils were monitored according to the following criteria: goal-setting, communication, creativity, reflection. These criteria were chosen as the fundamental basis of meta-subject competencies necessary for self-realization of pupils in the conditions of modern realities. In addition, goal-setting and reflection are integral components of the heuristic component of the games we develop, which served as another argument for their use within the evaluation system. Evaluation was carried out on a five-point scale, detailed criteria for evaluating each indicator were developed in advance.

At the ascertaining stage of the experiment, for 20 pupils of both groups (control and experimental), an entrance test was conducted, which consisted of tasks on goal-setting, communicative, creative and reflective abilities. The results were similar in both groups. The components "Goal setting" and "Reflection" were identified as the most problematic, therefore, at the formative stage in the experimental group, they are given special attention.

The formative stage is the introduction of heuristic games into the teaching with the experimental group. Below is an example of a heuristic game (In accordance with the textbook "English. Grade 5" L.M. Lapitskaya, Unit 1).

Game "Jurassic Park"

First, students are divided into pairs. Introduction:

You are paleontologists who have found dinosaur bones. You decided to describe what this dinosaur could do and how it lived. In pairs, draw your "found" dinosaur, come up with a name for it, describe its appearance and character, and then tell what it could do (He could swim, he could eat leaves, etc.)

Collect all the drawings and imagine that your dinosaurs came to life and you found yourself among them! What will you do if one of them decides to feast on you?

Offer your options for rescue.

Choose the most dangerous and cutest dinosaur.

Choose the best rescue option. Explain your choice.

Reflection, tasks:

- 1. Would you like dinosaurs to live in our time?*
- 2. Do you like being a paleontologist? If yes, say why?*
- 3. Dinosaurs also live inside each of us – these are our bad habits. What is the most dangerous dinosaur living in you?*

As we observe, the difference between a heuristic game and a typical language didactic game lies in the possibility not only to refer to the cognitive component of learning, but also to the metacognitive one, which will allow the formation of meta-subject competencies. There is inclusion of

creativity, communication, appeal to critical thinking and reflective activity. At the same time, the emotional component is preserved due to the bright plot of the game, thematically close to children. During the game, pupils turn to each other, and reflection questions allow the child to turn to himself. Thus, both external and internal dialogues are achieved.

The intermediate control stage of the experiment was a complex testing, which included a cognitive component (tasks for mastering the studied language topics) and initially selected criteria (goal-setting, communication, creativity, reflection). After 4 months in the experimental group (in whose training heuristic games were used) positive changes were observed in all criteria for assessing meta-subject competencies. In the control group, the indicators differ slightly from the results of the entrance test. Diagnostics of the acquisition of direct language skills (oral interview and written assignments) showed that in the experimental group 65% of students showed high results in all language aspects (speaking, reading, writing and listening) in accordance with the training program, 35% of students showed satisfactory results. In the control group, 60% of students had high rates, and 40% had satisfactory ones. A summary table of the experimental data is presented below (see Table):

**Data from the experiment on introducing heuristic games
into the learning process**

	Control group/experimental group	1	2	3	4	5	6	7	8	9	10
Entrance testing	Goal-setting	3/2	2/3	3/3	3/3	2/2	3/3	2/4	3/2	3/3	3/3
	Communication	3/3	3/4	4/4	4/4	4/4	4/3	4/4	3/4	4/4	3/4
	Creativity	3/3	3/3	4/3	4/4	3/4	3/3	3/3	3/3	3/3	3/3
	Reflection	2/2	2/2	2/2	3/2	3/2	2/3	2/3	2/2	2/2	3/2
Final testing	Goal-setting	3/4	2/4	3/4	3/4	2/3	3/4	2/5	3/3	3/4	3/4
	Communication	3/5	3/5	4/5	4/5	4/5	4/4	4/5	4/5	4/4	3/4
	Creativity	4/4	3/4	4/4	4/5	3/5	4/4	3/4	3/4	3/4	4/4
	Reflection	2/3	2/3	2/4	3/4	3/3	3/4	2/4	2/4	2/4	2/4

The intermediate results of the experiment show that heuristic games, regularly used in the classroom, allow students to form meta-subject competencies in the learning process, and also improve the effectiveness of the cognitive component of learning, since the combination of games and heuristic learning techniques provide emotional inclusion for each student, maintain motivation and focus on self-realization and knowledge of the environment. This confirms the feasibility and advantage of using heuristic games in the educational process.

We have come to the following conclusions. The heuristic game is a balance of rational knowledge and irrational self-comprehension by pupils. The advantage of the heuristic game is the simultaneous discovery by the pupil of his inner and outer space, which are prerequisites for self-realization. The heuristic game does not have a previously known solution for the pupil, unlike the traditional didactic game, which predetermines the development of meta-subject competencies. The intermediate results of the experiment showed that maintaining motivation and focusing on self-realization has a positive effect not only on the development of meta-subject competencies, but also on the cognitive component of learning, which makes it possible to evaluate the effectiveness of using heuristic games in teaching schoolchildren.

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СОВРЕМЕННЫЕ КУЛЬТУРОВЕДЧЕСКИЕ ПОДХОДЫ К ОБУЧЕНИЮ ИНОСТРАННОМУ ЯЗЫКУ КАК СРЕДСТВУ МЕЖКУЛЬТУРНОГО ОБЩЕНИЯ

MODERN CULTURAL APPROACHES TO FOREIGN LANGUAGE TEACHING AS A MEANS OF INTERCULTURAL COMMUNICATION

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В статье рассматриваются культуроведческие подходы, предполагающие неразрывность соизучения языковой и культурной картин мира при изучении иностранных языков как обязательного условия обеспечения эффективной межкультурной коммуникации.