

The Use of Interactive Methods in Teaching Students of Economics

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Abstract. The article is devoted to the use of interactive methods in teaching economics students, which means a complex phenomenon, expressed in the ability of a graduate to adequately apply mathematical methods in professional activities in order to effectively implement them. The role of interactive teaching methods is given and, as an example, a business game is given, a definition of a business game is given, its modifications, stages of organization and implementation are considered.

At present, society is faced with the problem of insufficient economic and mathematical preparedness of graduates of professional higher educational institutions, since the knowledge acquired by economics students is often theorized, divorced from reality. This means that the competitiveness and high qualification of such graduates is out of the question. They are not always capable of solving problems of a professional nature with high quality and in a fairly short time.

Starting from 2021, Uzbek higher education institutions have begun the transition to the new state educational standards of the third generation, the main focus of which is on the formation of professional competencies among university graduates. The restructuring of personnel training, incorporated in the new education system, required the reorganization of the educational process, in particular, the introduction of active and interactive methods and forms of learning into the modern educational process, where the emphasis in teaching is shifted to the independent work of the student, controlled by the teacher [1]. As a result of using such methods, the following tasks of the educational process are solved:

- 1) motivation in the study of the discipline under consideration increases, students develop an interest in it;
- 2) educational material is absorbed more effectively;
- 3) learning outcomes are as close as possible to the field of practical activity;
- 4) students independently try to find and find ways and options for solving the task (problem) assigned to them;

5) future specialists learn to work in a team, respect the rights of each participant to their own opinion;

6) students develop life and professional skills.

In connection with the foregoing, it becomes relevant to develop teaching materials on the use of active and interactive methods in teaching mathematical disciplines that have significant applications in economics and business.

Currently, the active form of learning assumes that the learner is the "subject" of learning. The educational activity of the student is carried out through independent work and the performance of creative tasks [4].

The interactive method of teaching involves interaction not only between students and the teacher, but also between students as well. The role of the teacher is to direct and control the activities of students to achieve the goals of the lesson. The use of this method involves modeling real life and professional situations, joint search and problem solving. The predominance of one of the participants in the educational process or any idea over others is excluded. The student actively participates in the educational process, builds his own educational line.

Some educators see interactive methods as the most modern form of active methods. However, we will separate them. Let us dwell in more detail on interactive teaching methods.

Currently, scientists and educators distinguish three types of interactive learning used in the educational process [3]. Let's consider each of them in more detail.

The first type of interactive learning is the interaction between the student and the subject of study. It is assumed that the student raises the level of his intellectual development by "communicating with himself" about ideas, information received from a textbook, lecture, TV show. To do this, students must have the following teaching aids: educational audio, video materials, computer programs, texts. Learning in this interaction is essentially self-sustaining.

In the second type of interactive learning, the student interacts with the teacher. The teacher, following the program of the taught discipline, helps to increase the student's interest in the material being studied, causing him to be motivated to learn, encouraging him to develop self-motivation.

The student studies certain informative material that demonstrates how to apply the acquired knowledge, modeling certain approaches. Then the teacher creates a situation in which the student can show how he independently applies the acquired knowledge, skills and abilities. The teacher evaluates the work of students in order to determine the effectiveness of the educational process, and, if necessary, not to miss the moment of changing the teaching strategy. The teacher can provide some assistance to each student, depending on his level of preparation [2].

With this form of interactive learning, the student himself, based on the experience of the teacher, can determine how best to study the subject. The teacher communicates with each student separately. This allows him to determine the degree of motivation of each student, in time to eliminate the cause of misunderstanding of the material.

The role of the teacher is especially relevant at the stage of assessing the application of new knowledge by students. A student can get acquainted with the discipline under study and determine his motivation without the help of a teacher, but at the stage of comprehensive application of the acquired knowledge in practice, he needs help. The interaction between the teacher and students in the second type of interactive learning is of the greatest importance at the

stage of approbation of knowledge and in discourse.

With the third type of interactive method, students interact in a group or without it, in the presence of a teacher or without him. Teaching students in a group is a fundamental learning resource, as in business it is very important to have the ability to interact effectively in a group project. Students learn the skills of group work, learn the principles of group relations and leadership in the process of applying appropriate trainings. The experience of collective work acquired in this way becomes the most valuable both for the students themselves and for their teacher.

There are various methods of interactive learning. These include discussions, debates, round tables, case studies, business and role-playing games, master classes, etc.

Preparing and conducting classes using active and interactive methods takes a lot of time and requires considerable effort. In this regard, the development of methodological materials filled with specific content on the use of active and interactive methods in teaching students is necessary. Let's consider examples of using active and interactive teaching methods by teachers of the department "Higher Mathematics and Statistics" in the process of teaching mathematical disciplines.

In the process of studying the course "Game Theory" (direction "Economics", qualification BACHELOR) in the conditions of a competency-based approach, the curriculum of the Tashkent Economy and Pedagogical Institute provides for the fulfillment of a creative task. The topics of creative work were developed by us, based on the formed competencies of this area of training [2].

Each student in the group chooses one of the proposed tasks. Let us formulate the topics of such work, indicating the competencies that it forms. PC-15 of the educational standard of the direction "Economics" says that the future graduate should be able to take part in the improvement and development of educational and methodological support for disciplines. In this regard, one of the students' creative tasks was aimed at creating tasks for the discipline being studied, including test ones [5]. When performing creative tasks of such a plan, several people can participate at once. Students who expressed a desire to engage in methodological activities were divided into groups of three. Each group received some necessary methodological recommendations for the development of educational tasks, various types of tests, including professional ones, for the solution of which it was necessary to apply the knowledge and skills acquired in the Game Theory course. There were four groups in total.

The first ingroup was supposed to present tasks on the topics "The concepts of game theory. Classification of games. The payoff matrix of the game. Saddle point of the game. Solution of the game in pure strategies. Ratio $\alpha \leq v \leq \beta$ ". The second group was engaged in the development of training tasks and tests on the topics "Simplification of payoff matrices. Solving 2x2 games in mixed strategies by the analytical method. A graphical method for solving problems of game theory. The third team was engaged in the preparation of assignments on the topic "Methods for solving games with a payoff matrix of size mxn". The fourth group developed tasks and tests on the topic "Decision making under risk. Decision making under conditions of uncertainty".

In the process of performing such a creative task, students learn to work in a small group created to perform a specific task, learn to use and use technical means and information technologies to achieve the goal [4].

To form the professional competence of PC-9, according to which students in the process of studying at a university should develop the ability to use domestic and foreign sources of information to collect the necessary data, analyze them and prepare an information review and / or analytical report, creative tasks were proposed, which are informational, historical, research in nature. The completed work should be presented in the form of a message, accompanied by a presentation. We list several topics proposed to students for development.

1. History of the development of game theory (review).
2. Present and future of game theory.
3. The founders of game theory - J. von Neumann and O. Mongerstern.
4. The contribution of the Nobel laureate J. Nash to the development of game theory.
5. N.N. Vorobyov is the founder of the Soviet school of game theory.
6. The contribution of Soviet scientists to the development of game theory.
7. Economic interpretation of the minimax and maximin principles.
8. Game theory and making effective decisions in the financial and economic field.
9. Game-theoretic models of decision making in ecological and economic systems.
10. Use of game theory in management.

This kind of creative tasks can be offered to students in the course of the entire study of the course of any mathematical discipline. Completion of such tasks increases interest in the subject being studied. Future economists, on the one hand, get acquainted with the formation of science in the history of human development, on the other hand, they learn to identify economic problems that can be solved using mathematical methods [2].

Among the interactive teaching methods used in the course of teaching mathematical disciplines and econometrics, the most popular are: the method of projects, case-study, "business games", brainstorming, trainings.

The project method is the most versatile teaching method, which forms almost all the competencies needed by future economists. The main goal of the project method is to teach students to independently solve significant problems that arise in a person's daily life, in his professional activities, in science. In the process of working on a project, students learn to think independently, find and solve problems, use information technology, predict, analyze and evaluate the results of their own activities. They develop the skills of cognitive activity, creative initiative. Students not only learn to use previously acquired knowledge and skills, but also independently acquire the missing knowledge from various sources. During the project, they develop their research skills, such as observation, problem identification, experimentation, gathering the necessary information, hypotheses, analysis and generalization.

The educational process during the implementation of the project is built for each student individually, with a focus on his personal qualities. Each trainee has the opportunity to independently choose the pace of work with an orientation to his level of development.

The result of the project is to obtain a practical result, designed in the form of an album, video, magazine article, website, report with a presentation, etc.

In the process of teaching economics students to mathematical disciplines, the project method is the most effective. Let us give examples of the use of project activities in the courses "Game Theory", "Operations Research", "Methods of Optimal Solutions".

Students are invited to find a note in the media that describes the strategic interaction of people (companies, industries, government agencies, etc.). Next, you need to briefly describe the ongoing event and formalize it in the form of a game. To do this, students need to specify a set of

players, a set of strategies for each of them, and for each possible profile of strategies, enter payments for all players. If the article is taken from the past period, then students can be asked to trace what strategies the players used in reality and whether their choice can be considered optimal.

Tasks of this level are focused on the search and development of the problem by the student on their own. Consider another variation of the project method. A group of students of several people in the course of studying the discipline "Discrete Mathematics" of the basic part or in the course of choice "Fuzzy Sets" is offered the following topic "Evaluation of the economic efficiency and risk of an investment project". Students independently analyze it and break it down into mini-topics, for example, "Traditional methods for assessing the economic efficiency of investment projects", "Application of fuzzy set theory in assessing the effectiveness and risk of investment projects", "Risk function of an investment project". Then each student independently studies and develops his own mini-topic. Following the results of the work, he presents the results in the form of a short report in his group. Further, the material is synthesized and presented to the entire training group in the form of a presentation.

As practice shows, tasks of this level cause a fairly large activity of students, as they are aimed at studying real situations. Trainees are creative and willing enough to approach their implementation.

The role of the teacher when using the project method in teaching students is to motivate, observe, advise, indirectly guide and collectively analyze and evaluate the results. The presented examples of the use of active and interactive methods in teaching students of economic universities in mathematical disciplines show how it is possible to activate and methodically ensure students' independent work. Thus, the use of these methods in the educational process makes it possible to make the student an active participant in it, to form and develop the cognitive activity of students, their self-reflection. The use of active and interactive methods in teaching contributes to the formation of a creative, active personality, able to adapt in a modern, constantly changing world.

References

1. Abdullaeva A. M. Formation of professional competencies of an economist by means of ICT in Mathematics Classes // *Pedagogical Sciences*. 2022. No. 57–3. pp. 209.
2. Alieva Ch. M. The use of active and interactive forms of methods in teaching mathematics to economics students (on the example of a business game) // *Young scientist*. 2017. No. 4.1 (138.1). pp. 6-9.
3. Krutikhina M.V., Chernyadieva E.V. Business games of economic content in teaching mathematics to students of general education classes. Kirov, 2020. pp 317.
4. Murodov B.D., Sharipova K.K. Experience in organizing a business game in the process of teaching mathematics // *International Student Scientific Bulletin*. 2022. No. 6. pp. 149.
5. Sattorov N.N. Interactive teaching methods in higher education // *Psychological Journal*, 2021. No. 2. pp. 111-118.