

## USE OF EDUCATIONAL METHODS IN COMPUTER LESSONS

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### Abstract

Currently, there are many types of training in advanced pedagogical technologies (interactive methods), which are selected in accordance with the characteristics of the subject of the lesson and the intended goals, and are prepared accordingly. This is very important when passing computer science classes. In this case, special requirements are placed on the students' preparation. The main goal of pedagogical technologies in education is to bring the student to the center of the lesson process in the teaching system, to turn him away from automatic repetitions, to develop independent and creative activity, and to turn him into an active participant of the lesson.

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Today, science and technology are developing rapidly, which requires teaching using new technologies. It is an urgent issue that every pedagogue employee, knowing that he is a responsible person, increases the efficiency of the lesson and makes effective use of new technologies in the education of young people who are our future. Today, science has a strong place in the archetype of the modern information society. In this, the epistemological, creative heuristic function of science as an institution of creative knowledge of the structure of existence plays a special role. When using information and communication technologies in education, the student has the opportunity to hear, see and think independently based on what he sees. In the educational district, there are certain conditions for organizing classes in interactive ways using information and communication technologies. Therefore, the effective use of information and communication educational technologies is one of the most urgent tasks to create the theoretical and practical foundations of pedagogical skills that meet the requirements of the time and the process of its formation, based on the achievements of the present time. Science is a developing, growing system of knowledge, the practice of social consciousness and personal civilization, which leads to the chronic and deep assimilation of the surrounding world, accurate, deep, truthful information about the laws of existence of natural and social reality. receiving, is a special form directed at assimilation, storage, processing and use of such information. The development of science is a way of collecting facts, studying them and systematizing them, generalizing and discovering certain laws, creating a logical system of scientific knowledge that can explain the essence of the currently known facts and is able to predict new ones. goes on a whim.

The main task of the subject of informatics is to introduce students to some general ideas of modern informatics, to reveal the practical application of informatics and the role of computers in modern life. Therefore, to increase the effectiveness of teaching "Informatics", the wide use of pedagogical and information technologies in the organization and conduct of training sessions, the development of

software suitable for the content of training, and their introduction into the educational process is one of the main tasks. Taking into account the relevance of these tasks, it is necessary to study and analyze the state of use of game technologies in the teaching of "Informatics", develop the methodology of their effective use, and appropriate methodological recommendations.

Nowadays, the task of educating the growing generation to be independent thinkers is important. The solution to this problem largely depends on the use of interactive teaching methods. Interactive teaching is communicative teaching, in the course of which there is interaction between the teacher and the student. The essence of interactive teaching is to organize the educational process in such a way that all students are involved in the learning process and have opportunities for free thinking, analysis and logical thinking. Interactive activity in the lessons envisages the organization and development of communicative communication that leads to mutual understanding, cooperation, joint solving of control tasks that are common, but important for each participant. In the educational process using interactive methods, students learn to think critically, solve complex problems based on the analysis of their conditions and relevant information, evaluate alternative opinions and make reasonable decisions, participate in debates, and communicate with others.

For this, individual, pair and group work are organized in the lessons, research projects, role-playing games, creative works are used, and work is carried out with various sources of documents and information. In the process of organizing teaching by interactive methods, the content of the tasks given by the teacher is a powerful tool for the development of the student's thinking. These assignments are of varying levels of complexity and should encourage students to think, think, imagine, create, or scrutinize. Below we present the description and essence of a number of interactive methods: "Brainstorming" method. This method is a widely used method for solving problems on a specific topic, and it provides the participants of the training with the ability to think broadly and comprehensively about the problem, as well as to use their imaginations and ideas in a positive way, and encourages the creation of skills. In the course of training organized using this method, there is an opportunity to find some original solutions to arbitrary problems. The "Brainstorming" method creates conditions for identifying certain values within the selected topics, and at the same time for choosing ideas that are alternative to them. When using the "Brainstorming" method during training, it is necessary to follow several rules. These rules are as follows:

1. To encourage the participants of the training to think broadly within the framework of the problem, to achieve the expression of unexpected logical opinions by them.
2. The number of opinions or ideas expressed by each learner is encouraged. This allows you to choose the most appropriate from among the opinions expressed. In addition, stimulation of thoughts leads to the formation of new thoughts or ideas.
3. Each learner can be based on his personal opinion or ideas and change them. Summarizing, categorizing, or changing previously expressed opinions prepares the ground for the formation of scientifically based opinions.
4. Controlling any activities of learners during the training based on standard requirements does not allow to evaluate the opinions expressed by them. If their opinions are evaluated and evaluated, learners will focus on protecting their personal opinions, and as a result, they will not put forward new ideas. Keeping in mind that the main goal of using this method is to encourage students to think broadly and deeply about the problem, it is advisable to abandon any method of evaluating their activities.

"I know. I found out. "I want to know" method. Students are divided into five groups, the groups are named. The writing board is divided into three parts. The words "I know" are written at the top of the first paragraph, "I learned" at the top of the second paragraph, and "I want to know" at the top of the third paragraph. Then the teacher asks the students what information they have on the topic and writes

down the expressed opinions in the paragraph called "I know". This action continues until the groups have fully expressed their ideas. It is necessary to attach importance to the active participation of all members of the groups in this process. It is necessary not to deny wrong opinions expressed by students.

At the next stage, the students will be distributed texts related to the topic. This text contains the most basic concepts on the topic. After getting acquainted with the text, students should reflect and determine what other information they have learned about the topic. Students express their opinions based on their conclusions, these opinions are written in the column entitled "I learned". At the last stage, the teacher asks his students what information they want to learn on a new topic and encourages them to think again. Groups are asked for their opinions in turn. The opinions expressed by students are written in the column entitled "I want to know".

For example: The text is distributed to students. Students get to know the text individually (7 minutes). Then, in groups, they fill in the table mentioned above. Boomerang technology.

This method allows students to work with various literature and texts during the lesson, outside of the lesson, to remember the learned material, to speak, to express their opinion freely, to get a lot of information in a short time. and aimed at being able to evaluate all students by the teacher during the lesson.

The purpose of the method: during the learning process, the learning of the distributed materials by the students individually and in groups, and during the process of monitoring and evaluating the extent to which the texts in the distributed materials have been mastered by each student through discussion and various questions. to make it possible for them to acquire their grades.

Application of the method: It can be used individually, in small groups and in groups during practical training and conversation-discussion classes.

Tools used in the lesson: handouts designed for the student to read, learn and master independently during the lesson.

Training procedure:

This method is carried out in several stages:

- students are divided into small groups;
- students are introduced to the purpose and order of the lesson;
- texts on the topic are distributed to students for independent study;
- given texts are studied individually by students;
- a new group is formed from the members of each group;
- exchange information with the texts of the members of the new group that each group has learned independently, that is, they talk to each other, they get to master the text;
- internal control is carried out within the group to determine the level of assimilation of the given information, that is, group members ask questions to each other;
- new members return to their original group;
- during the rest of the lesson, a "group accountant" is appointed in each group to evaluate students' knowledge or calculate their points.

In order to determine the extent to which the students have mastered all the texts, the teacher addresses the students with questions, conducts an oral survey;

- based on the answers given to the questions, the total points scored by the groups are determined;
- each group member prepares one question, connecting the content of the text in the group to life;
- questions and answers are organized through questions prepared by groups ("group accountants" calculate points based on the given answers);
- the sum of the total points collected by the group members is determined;
- The total points collected by the groups are divided equally among the members of the group.
- Completing the lesson, giving homework.

Venn diagram. The Venn diagram is in the form of a graphic, and it is used to summarize the obtained results and draw a whole conclusion from them, to analyze and study two or more subjects. A diagram is formed by the intersection of two or more circles.

Purpose: formation of knowledge and skills in comparing two or more subjects and concepts, identifying their different and common aspects.

Implementation steps:

Stage 1. Pupils fill in two circles, the important aspects of two concepts are listed in each circle.

Stage 2. We combine the students into small groups and compare and fill in the diagrams.

Stage 3. We invite the students of a small group to identify the general properties of these concepts.

Step 4. A representative of a group reads the specific aspects of each concept.

Others fill in the answer when necessary.

Step 5. The representatives of the other group read the features that unite the two concepts.

Others fill in these answers as needed.

In conclusion, it should be said that the development of new methods and techniques in the teaching of computer science and their application in the teaching process are relevant today. It is important to study the experience of using the methods and to approach it with purpose, to humanize the educational process, to transform the student from a passive object to an active subject, to ensure that cognitive activity is directed to specific goals, and that the educational process is reproducible as a production process. will be important.

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