



Use of interactive methods in teaching some subjects of "Discrete Mathematics and Mathematical Logic"

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Annotation: In this article, "Working with red and green cards" method is applied to the teaching process, their advantages and disadvantages are listed. It shows what kind of questions can be asked when using these methods.

Key words: Red card, Green card, student, pen, group, method, advantage, disadvantage, confirmation, denial.

One of the important requirements for the organization of modern education is to achieve great results in a short time without spending too much mental and physical effort. It is the responsibility of the teacher to deliver certain theoretical knowledge to students in a short period of time, to create skills and competencies in them for certain activities, as well as to control the activities of students, to assess the level of knowledge, skills and competencies acquired by them. requires high pedagogical skills and a new approach to the educational process.

The article [1] first gives a brief information about the theory of matrices. The relevance of problem-based learning in teaching mathematics in higher education institutions was also discussed. Examples of solving problems using the elements of matrix theory are given. In the first problem, the problem of solving a matrix equation is presented as a solution of a system of linear equations. In the second problem, the problem of determining the order of the determinant corresponding to the matrix and the sign of the expression using the given expression was analyzed.



[2] in the article comments on the use of the "Methodology of working in small groups", which is one of the interactive methods of modern education, in the teaching of higher mathematics in higher educational institutions. The structure and application of this method is described in the example of teaching the topic "Matrixes and operations on them". Also, the scientific novelty of matrix theory is considered, it is shown that it can be used to justify the relevance of this topic for other sciences. Advantages and disadvantages of using the method are also discussed.

The article [3] analyzes the role of interactive methods in teaching the topic "Linear integral equations" of functional analysis. First, linear integral equations and their solution methods are briefly described. Feedback on how to choose methods for solving linear integral equations is given. Problems related to linear integral equations that can be solved by the method of reducing to an algebraic equation are presented. At the beginning of the training session, innovative methods used to determine the level of students' mastery of the subject and to repeat the subject were discussed.

Articles [4-6] contain some comments on the teaching of some topics of mathematics using interactive methods.

"Working with red and green cards" method: It is very convenient to conduct this method with students in mass or group form. The method can be used to organize a quick question-and-answer session on strengthening the topic after the training. The method can be used in the lesson by organizing it in the following order:

- according to the number of students in the group, the teacher writes red and green cards for each student and questions about the topic on these cards;
- as many questions as possible that can be answered with "yes" or "no" are written on the cards;
- red and green cards are distributed to each student;
- students are told that red cards mean "confirmation" and green cards mean "denial";



- students answer the questions asked by the teacher based on showing the cards meaning "confirmation" or "denial".

In this article, we focus on the advantages and disadvantages of using the method of "Working with red and green cards" in the course of the practical training organized for the first-year students of higher education institutions on the subject of "Discrete Mathematics and Mathematical Logic". our

In this case, we can write the following questions on the card to be distributed to the students:

- 1) Is it possible for a statement to have a value other than true or false?
- 2) Can an implication take a false value when both propositions are false?
- 3) Is there a logical operation that takes a false value when both statements are true?
- 4) Can a formula that accepts a false value be called a tautology?
- 5) Can we tell whether the quoted formula is MDNsh or MKNSh by looking at the arrow outside the brackets?
- 6) Etc

We will prepare the same number of questions according to the number of students in a similar group. The advantage of this method is that students learn to think quickly and respond quickly, i.e. agility. However, along with the advantage of this method, there is also a disadvantage, which is that the student can give an approximate yes or no answer to the question even if he does not know the full answer.

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