МЕТОДЫ И МЕТОДИЧЕСКИЕ ПРИЕМЫ ОБУЧЕНИЯ ФИЗИКЕ

Аннотация: В этой статье обсуждаются методы и методические приемы обучения физикой

Ключевые слова: физика, обучение, метод, педагогика

METHODS AND METHODICAL ADMISSIONS OF TRAINING PHYSICS

Abstract: This article discusses methods and methods of teaching physics

Keywords: physics, teaching, method, pedagogy

Learning outcomes depend both on the correct definition of the goals and content of education, and on ways to achieve goals, in other words, methods.

Educational and educational process is a process of two-sided, combining teaching activity of the teacher and educational activity of a schoolboy. Therefore, the method of training "is a system of purposeful actions of the teacher, organizing the cognitive and practical activity of the student, ensuring his mastering of the content of education and thereby achieving the goals of learning."

The history of didactics and private methods has shown that the methods of instruction depend on the aims of education and the content of education.

The method of instruction is a social category, since it depends on the social order of the society to the educational institution. As you know, the goals of training the younger generation have been changing and complemented in accordance with the prevailing social goals and world outlook of society. Thus, in the early stages of the school's establishment (in the era of feudalism), the only
task that stood before the students was the assimilation of predominantly scholastic knowledge. Obviously, the methods used by the teacher were basically a story; pupils, however, had to perceive the information and reproduce it. Later (in the period of the development of the bourgeois system), a requirement appeared to learn the application of knowledge in practice. Under these conditions, the teacher had to organize not only the assimilation and reproduction of knowledge, but also their practical application. At the present stage, the goals of education have radically changed. Along with the formation of knowledge, skills and skills of students, that is, the solution of educational problems, before the school there is a complex of problems connected with the development and upbringing of the younger generation. The tasks of development of thinking of schoolchildren, their cognitive activity and independence, the formation of modern misunderstanding are today priority. Accordingly, the system of methods used in the teaching process has changed, among which a special place belongs to methods that organize cognitive activity of students at various levels. Thus, the story as a traditional method of teaching for the school began to be built problematically, there was an interest in non-traditional, creative tasks, in the laboratory work of the teacher began to introduce elements of an independent, research experiment, Further, the applied system of teaching methods depends on the content of education. Any change in the content of education - the range of educational knowledge, their structure - affects the selection of teaching methods. So, the principle of generalization significantly influenced the methodology of teaching physics in general and the methods of teaching in particular: the role of deductive acceptance of the deposition of new material increased; the share of teaching methods, which initiate independent work of students, increases their cognitive activity; more important were the methods of teaching, such as heuristic, research, etc.

Watching the learning process, you can see a huge variety of activities of the teacher and students. The teacher explains the new material - this is the method
of explanation or the method of dissection; schoolchildren solve problems - this is the method of solving problems; do laboratory work - laboratory method of teaching; the teacher uses the demonstration experiment in the process of explanation - the method of demonstration, etc. Moreover, the same teacher can explain the same material in different classes using different methods: in one - the method of the story, in the other - the method of conversation, and in the third - the method of research front work and etc. At the same time, the same teaching method can be completely differently organized depending on the expected level of cognitive activity of schoolchildren and their independence. For example, laboratory work can be done according to the instruction, in which all the stages of the work are indicated, and the students will only reproduce the actions called by the teacher, and you can organize an independent research. This will already be a research method or a method of independent work.

In pedagogy, in addition to the concept of method, there is the concept of methodical reception. Methodical reception is a detail of the method, a partial concept in relation to the method. It should be noted that the separation of the concepts of the method and methodical reception is relatively. One and the same kind of activity in some cases can act as a method of training, in others it is a method. If the teacher explains the operation of the device (for example, an ammeter) and this is the didactic task of the lesson, then he uses the demonstration method, and the accompanying demonstration of the teacher's story is only a methodical technique. If the demonstration accompanies the teacher's explanation, then it can be considered a reception, the method will be the explanation of the teacher. In the method of controlling the knowledge and skills of students, I can include such techniques as problem solving, questioning (individual or frontal), conversation, etc. For orientation in a variety of methods and methodical methods, their systematization is necessary.
Used sources:

