

USE OF TEACHING METHODS OF MECHANICAL DEPARTMENT IN INSTITUTIONS OF TECHNICAL HIGHER EDUCATION IN INNOVATIVE EDUCATIONAL CONDITIONS

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ANNOTATION

This article focuses on the development of theoretical knowledge, practical skills and experimental skills of students in the teaching of physics in technical higher education institutions in an innovative environment. The use of different methods in the teaching of physics serves to increase the motivation of students to think independently, to increase their interest in science, and to master more difficult topics more easily. For this purpose, it is recommended to use different methods.

Keyword: innovation, motivation, method, paradox, virtual, interactive, educational, student, practical, factor, technology

INTRODUCTION

In recent years, the development of the scientific and theoretical and methodological foundations of teaching physics in our country, the organization of an innovative educational environment in the application of modern teaching techniques and methods during the lesson, as well as the foundations of an innovative approach to education are being developed. "The implementation of additional measures to increase the volume and effectiveness of scientific and theoretical research in the field of physics, the creation of the necessary scientific and pedagogical conditions for young researchers" is a priority. Therefore, the development of a new generation of literature on the teaching of physics, the content of Science and technology, educational literature, as well as the inclusion of the current potential of the development of production technology, the methodology and collection of solving issues, methodological manuals on the implementation of laboratory work, the possibility of creating electronic software products has increased [**Error! Reference source not found.**].

The innovations that are widely used in educational practice today and form the basis of the innovative activities of most teachers are aimed at modernizing, improving teaching methods and teaching tools.

The main task in the teaching process is the teacher with the student. Their treatment and interpretation of each other has a specific meaning, and their cooperation in the process of giving knowledge is considered different. We call this joint movement, in other words, the teaching method of the joint movement of students and students with the teacher. Usually, we say that if the bordiyu teacher, student and students spoke and told it themselves, the teacher used an oral method; if the teacher and students learned the text in the textbook by reading it independently, then the method of working it with a book; if the students solved the issue - we say that the method of solving the issue was applied. When we list such actions of students and students with a teacher, there are a lot of them. Assuming that all the activity that corresponds to each of them is a method, the greater the number. The concept of teaching method is interpreted by authors in different ways.

The method is derived from the Greek word "methodos" meaning research method, path; method, method meaning path towards goal. It can be viewed as a decision of the system of actions of a person who seeks the intended purpose - the content of the study, from the fact that it is carried out due to a certain action, aiming at the appropriate goal. The movement of a person, with a specific purpose, is carried out with the help of appropriate means aimed at some object. As a result, the object undergoes a corresponding change, resulting in the desired result. If the result coincides with the goal set, then the remaining method is confirmed to be correct. In the educational process, special attention should be paid to some features. Experiments show that some students or students are reluctant to study, the same student, if the students are guided correctly, a clear goal is achieved during the course of the lesson if the goal of the student is matched by the goal of the student. This requires the use of various techniques to achieve the activity. For example, if the teacher's goal is to explain to the student the movement and internal structure of the car to the student, the student's goal is to diligently read what the teacher says and correctly understand the material stated. Teacher and student students'nig goal is to match each other and they must harmonize each other. This process should be carried out mainly by the teacher.

The large number of types of teaching methods comes from the fact that the purpose of teaching is different, in turn, the content of teaching is different. The speciality of the method depends not only on the content and purpose of the teaching, but also on the level of knowledge of the student. That is why there are several types of teaching that give without the presence of a single method.

Some authors have commented on the method in terms of the types of information as follows.

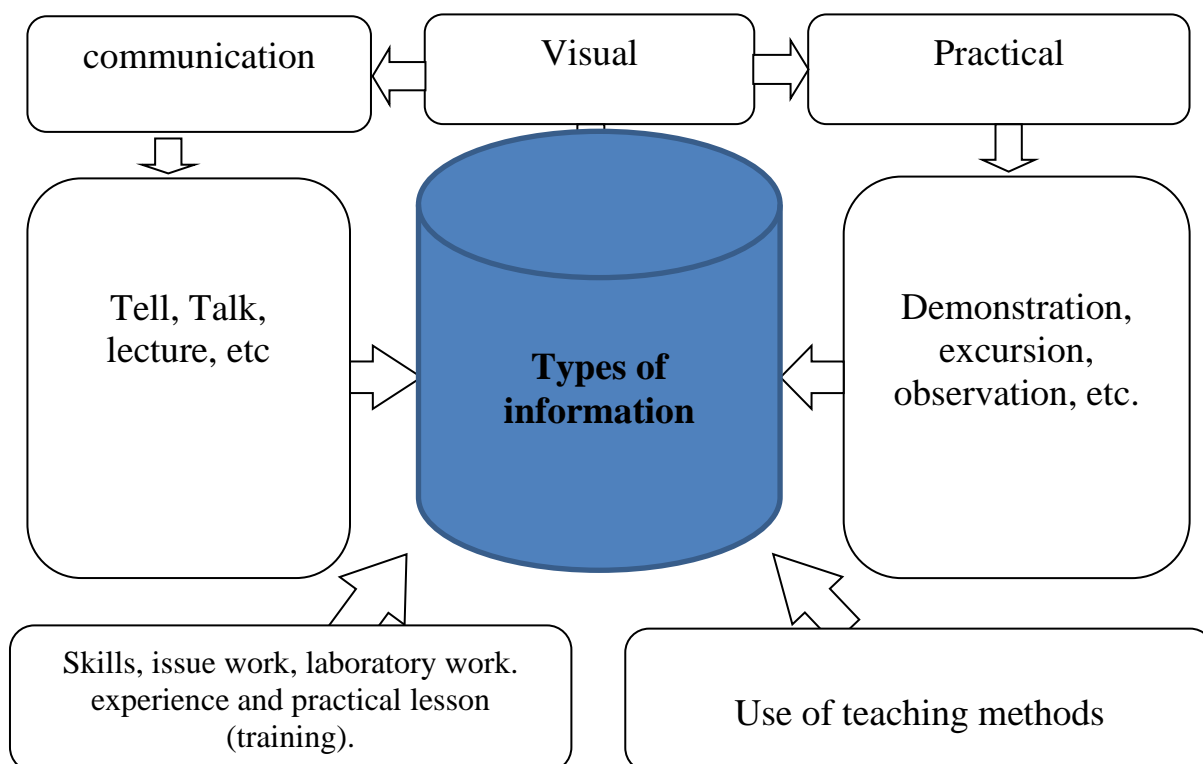


Figure 1.

When we organize a lesson using a number of techniques in teaching physics, we can expand the imagination of learners to increase their interest in science, increase their abilities for discovery.

The method of interpreting the essence of paradoxism or “paradoxes” when teaching mechanics. In the method of "paradoxes", the teacher ensures that in the process of conducting a lecture, the mechanical section meets the confrontation of students in mechanical concepts and knowledge. Such an educational-cognitive situation is mainly associated with the student's mistakes and mistakes in their concepts. So, this paradoxical situation is a situation in which the mechanical concepts of students are paradoxical, in contrast to the previous thoughts, concepts and conclusions. Students are looking for the error that caused the problem situation. Virtual discussions are a method that allows you to communicate with the program. The classical regime is convenient for preparing teachers for classes and for students to quickly see the necessary information on the subject of physics. Interactive mode, in turn, leads the student from simple to more complex material, where the order of choice of topics is determined by the program. At the same time, after completing work with Topic 1, the student must correctly answer a number of questions, after which the next topic will be open to him. This is the method of virtual dialogues - interaction with the program, which leads to a transition to more and more complex material depending on the number of correct answers on the previous topic. An interactive mode is recommended for independent work.

Computer development is a powerful tool for activating classes and increasing students' interest in physics. Video recordings make the course more attractive and help make the learning process lively and interesting. Working various levels of tests in the course of the lesson makes it possible to assess the level of understanding of the essence of the concepts of physical science.

The method of analysis of specific situations is considered a method that serves to focus the attention of an individual on certain factors, the purpose of its application is to develop the consciousness of an individual, expand his imagination, enrich his thinking.

The more specific purpose the method is applied, the higher its efficiency. If the student is reluctant to make this or that point Open, then the use of the method will not work.

When using the method in the process of training, it is advisable to draw up a list of factors that allow you to effectively master the topic, Having found the answers to the following questions in the effective assimilation of the topic.

Thus, in the context of innovative education, the technique makes it possible to effectively solve the tasks set for the use of methods of teaching the mechanical department in higher educational institutions. Educational methods can be used to achieve this process.

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