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materiallar to'plami

CONDUCTING LESSONS USING NEW PEDAGOGICAL TECHNOLOGIES IN TECHNICAL EDUCATION FIELDS (FOR THE EXAMPLE OF THE SCIENCE OF THE RESISTANCE OF MATERIALS)

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Abstract: Application of new pedagogical technologies in providing knowledge to technical students, conducting the lesson interactively and effectively using a number of new methods

Key words: interactive concept, brainstorming method, various terms related to the topic: bruce, plate, shell, massif (suspended body)

Before starting a new topic with students, the teacher should have one question: what method will I use for today's lesson? How can I find an effective solution to the given task? In order to achieve the pedagogical goals of the new type of training, the teacher uses his intellectual potential, uses advanced pedagogical experience, and uses interactive methods during the lesson as much as possible, determines the quality of the lesson. So what is the concept of interactive? Why do we need it? We will dwell on these and similar questions.

Interactive methods mean methods that activate learners and encourage them to think independently, with the learner at the center of the educational process. The concept of interactive is derived from the English word "interact" and its dictionary meaning is "inter" - mutual two-way, "act" - to act, that is, to work mutually during the lesson. means Currently, the most popular interactive learning methods are: "Case-study" (or "Educational cases"), "Blist-survey", "Modeling", "Creative work", "Problem-based learning" and b. [1]

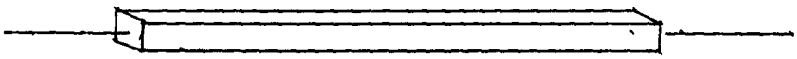
Let's study today's material resistance science by connecting it to a method. Before applying the method, we give a little understanding of the topic of the lesson:

The science of "Resistance of Materials" is considered a science of general engineering and teaches the methods of calculating the strength, uniformity and durability of constructions (structures), constructions, parts of machines and mechanisms. [2]

Requirements for strength, uniformity and priority of engineering structures have conflicting solutions with economic requirements. Because, to satisfy the first three requirements, it is required to spend more material, while economic requirements imply a reduction in material consumption in order to reduce costs.

The elements of complex engineering structures are schematically made to appear as simple objects. These include:

Brus - is a large body whose two dimensions of the cross-section are much higher than the third dimension (length). Brushes have straight and curved axes. Cross-sections form the geometric position of the center of gravity along the length of the beam.



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If the beam works for stretching or compression, it is called a beam, if it works for torsion, it is called a shaft, and if it works for bending, it is called a hammer beam.

A plate - is a body bounded by two flat surfaces, and the distance between the flat surfaces, that is, the thickness of the body, is many times smaller than the other two dimensions.



A shell is a body bounded by two curved surfaces, and its thickness, that is, the distance between the surfaces, is many times smaller than the other two dimensions.



A mass (weighted body) is a body in which all three dimensions are of the same order.



A geometrically invariant system is called a farm. Stergens, which make up the farm, work only for stretching and compression. A geometrically invariant system is called rama. [2]

We will start our lesson using the "Brainstorming" method. First of all, we write the topic and keywords related to the topic on the board, we indicate which topic we want to cover, and we ask the students what their understanding and imagination are about these keywords. Each student gives his/her understanding based on the key words, first the students who are listening to the lesson talk about the topic and other students join in. Here, the teacher's professional skills play a big role, that is, if the students speak correctly or incorrectly, he encourages them with words such as correct, bless, admire. After encouraging them, I will give them a little fill-in on this topic and cover the topic completely. In addition, it is advisable to use a projector, visual aids and equipment related to this topic.

Summary

In conclusion, today the innovative approach in teaching technical subjects is incomparable because the times are developing rapidly. One of the problems in teaching students is the lack of laboratory equipment, to solve this problem, it is necessary to integrate the practice and at least one day of class per week with factories and production enterprises.

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