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USING THE POSSIBILITIES OF THE CONFUSION LOGIC CHAIN METHOD IN ASSESSING STUDENTS' KNOWLEDGE

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Abstract: This article presents the results of the work on the use of the currently widely used confused logic chain method to assess the level of students' knowledge during practical training in theoretical mechanics.

Keywords: theoretical mechanics, dynamics, force, equation, differential equation, first problem, second problem, integration, initial speed, law of motion, equation of motion.

The process of education in our country is constantly developing and improving. In particular, the digitization of the educational process increases transparency for both students and professors and creates convenience for students. The Hemis system in use has demonstrated its positive aspects in a short period of time. Now it is necessary to adapt the system of teaching in all subjects and the system of assessing the level of students' knowledge to this platform. The problem of using the method of confused logical chain, which is considered one of the interactive methods, in the training of theoretical mechanics is relevant.

Let's consider the application of the method in the course of practical training on the topic "Solving problems of dynamics" of the dynamic department of theoretical mechanics taught at technical universities. First of all, materials from the bank of questions consisting of theoretical information on the topic according to the method of confused logical chain are distributed to find out the level of preparation of students. The teacher conducting the practical session distributes to the students of the group a copy of the tables corresponding to the number of students in the audience. After studying the given table in detail, students write down the answer number for

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each question listed on the left and the corresponding number on the right. Then the teacher collects the answers from all the students, checks them and announces the results. Below is a table corresponding to the above topic.

Determine compatibility:

1	Write the representation of the differential equation of motion of a material point?	1	The differential equation of motion is formed, it is integrated twice and the law of motion is found
2	How is the first problem of dynamics solved?	2	$m\frac{d^2\vec{r}}{dt^2} = \vec{F} + \vec{N}$
3	Describe the second main issue of dynamics?	3	$m\vec{a} = \vec{F}$
4	Write the vector representation of the differential equation of motion of a material point in a joint?	4	Taking the derivative of the given law of motion twice and multiplying it by the mass, the force components are found, based on them, the amount and direction of the force is found
5	Write the fundamental equation of dimamics?	5	Given the force acting on a material point and its mass, it is necessary to find the law of motion
6	How to solve the second problem of dynamics?	6	$m\ddot{x} = \sum F_{kx}$, $m\ddot{y} = \sum F_{ky}$, $m\ddot{z} = \sum F_{kz}$

Correct answers (6,4,5,2,3,1).

In the next step, we recommend students to use the method of confused logical chain with practical problems. In this case, the number of questions is six. Only problems that are relatively easy to solve are recommended to students here. The results of this score can be used to test students' knowledge in a non-traditional way to determine the level of student mastery of the studied topic and to determine intermediate assessment scores. At the beginning of the academic

year, professors of the department create a bank of questions on topics of theoretical mechanics, and they are regularly filled and improved. Below is the table covering the questions on the topic "Dynamics Problem Solving" of the Theoretical Mechanics Dynamics section:

Determine compatibility:

1	A material point with a mass equal to m moves in the plane according to the law x=3 cos t, y=3 sin t. Find the magnitude of the force acting on the point		$F = 200$
2	A material point moves downward under the influence of gravity from a height of 3 m with no initial velocity. Find the law of motion of the point, taking the head at the starting point of the motion.		$x = \frac{gt^2}{2} + 2t$
3	A material point starts moving along a straight line with a speed of 10 m/s. If the amount of resistance is 2mg, how long will it take for the dot to stop?		t=0,25 s
4	A material point starts moving along a straight line with a speed of 10 m/s. If the amount of resistance is 4mg, how long will it take for the dot to stop?		t=0,5 s
5	A material point with a mass of 4 kg moves according to the law x=2 sin 5t, y=2 cos5t. Find the magnitude of the force acting on the point		$F = 3m$

6	A material point moves downward under the influence of gravity from a height of 6 m with an initial velocity of 2 m/s. Find the law of motion of the point, taking the head at the starting point of the motion.		$x = \frac{gt^2}{2}$

Correct answers (5,6,4,3,1,2).

In conclusion, as a result of using the method of interactive confused logical chain in the practical training classes of theoretical mechanics, students are able to organize the topics they have studied in science, to be able to divide them into components, to compare them with other parts of the topic, and to understand information about the newly studied topic. Regular use of this method in lectures gives students the opportunity to systematically study scientific materials, organize, divide and differentiate what they have learned. As a result of the above facts, the level of knowledge of students will increase significantly. The ability of the teacher to quickly, transparently and objectively determine the level of knowledge of students, to successfully conduct intermediate and final evaluations increases.

When it is planned to evaluate students' knowledge based on the logical chain method in classes, it is necessary to pay attention to the following:

- it is necessary to expand the science question bank by topic and update it regularly.

- the question bank should be prepared separately for each subject, chapter and part of the science.

- it is necessary to create a bank of logical, easy-to-solve examples and problems related to the topics.

- in order to determine the level of mastery of the subject of science, it is necessary to compile the options of the tables consisting of 5-10 questions at least equal to the number of students in the group.

- the professor-teacher offers the option of tables consisting of 10-20 questions to students for mid-term assessment.

- it is recommended to prepare tables of 15-25 questions for the final control assessment.

- Samples of the question bank and example-problem bank and the order of execution

should be regularly published on the website of the department.

- the bank of questions and the bank of example problems should be updated every academic year.

So, the proposed method of confused logical chain is one of the modern and convenient methods for determining the level of students' knowledge, it is proved by the pedagogical experiences of professors and teachers of the department in recent years. This method is distinguished from other evaluation methods by its high effectiveness in checking the knowledge of students on one topic of science, on one chapter of science, and during midterm control.

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