PRINCIPLES IN TEACHING THE DIFFERENTIAL EQUATIONS DEPARTMENT IN HIGHER EDUCATIONAL INSTITUTIONS IMPLEMENTING CASE-STUDY TECHNOLOGY

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Annotation

This article provides suggestions and recommendations on the problems of teaching the section "Differential Equations" in higher education institutions using Case-Study technology, the principles on which they are based.

Keywords:

Differential equation, Case-Study, mathematics, principle, new pedagogical technology, theorem, ability, creative activity.

Today, in higher education institutions, special attention is paid to the formation of their knowledge, skills, competencies and competencies, creating problematic situations to improve the quality and level of professional training of mathematics specialists. Effective results can be achieved with the help of new pedagogical technologies of teaching them. There is no doubt that new pedagogical technologies, goal-oriented forms, methods and tools will give their effect in the teaching of mathematics. Observations show that, in most cases, the professor-teacher acts as a narrator in the teaching of subjects belonging to the category of mathematics. As a result, students participate only as listeners. Such education does not increase students' intellectual thinking and reasoning [1]. It is advisable to use Case-study technology to solve these problems. This technology directs students to independent research, independent decision-making. As a result, students' thinking skills and creative activity increase [2]. Therefore, it is necessary to use Case-study technology in the teaching of mathematics, in particular in the section "Differential Equations". To do this, we must first follow the following principles, which are based on teaching using Case-study technology.

The principle of science. This principle consists in the level of development of modern scientific technologies and their adaptation to world civilization in the teaching of topics related to differential equations [3]. The scientific principle is to equip topics related to differential equations with scientific concepts when taught using Case-study technology.

The principle of effectiveness of didactic teaching data. This principle involves the use of various didactic teaching aids to prove the theorems on differential equations, examples and problems related to them, the effective use of Case-study technology.

The principle of creativity. This principle is aimed at organizing the creative activity of students as a unique intellectual product in the organization of practical classes on differential

equations based on Case-study technology. It also includes the design of the educational process aimed at strengthening the interest in science and the formation of creative activity of students.

The principle of cooperation with students. This principle involves professors and students in proving the theorems of differential tags using Case-study technology during their learning activities, collective discussion in solving relevant examples and problems, obtaining and analyzing results in collaboration. In this case, the professor-teacher is to guide students to acquire knowledge, skills and competencies related to differential tags [4].

The principle of interest. This principle is to engage students by solving examples and problems related to differential equations using Case-Study technology and teaching them to apply in different fields.

The principle of providing educational problems. This principle implies an increase in students 'mental activity from solving examples and problems related to differential equations by generating problem situations based on Case-study technology.

The principle of pragmatism. This principle is aimed at teaching examples and problems of differential equations based on Case-Study technology to teach their application in different fields [4].

The principle of integrity. This principle is to ensure the integrity of the training based on Case-Study technology. The components of this will be: the use of interrelated approaches to learning; creation of an integrated training system for the organization of training; ensuring the mutual unity of educational activities.

In short, in higher education institutions conduct practical training in the department of "Differential Equations". We recommend relying on the above principles in the use of Case-study technology. Based on these principles, it is possible to increase students' interest in science and achieve creative thinking.

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