

THEORETICAL PRINCIPLES OF USING MODERN TECHNOLOGIES IN TEACHING PHYSICS IN ACADEMIC LYCEUMS

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***Abstract.** In the process of teaching physics, the theoretical foundations of the issues of organizing the lesson process using modern technologies, and forming the skills of students to apply the knowledge gained in the field of science in practice are presented.*

***Keywords:** physics, molecular physics, information and communication technologies, innovation, science, technology.*

The President of our country Sh.M.Mirziyoev's at the extended meeting of Cabinet of Ministers on January 14, 2017, dedicated to the sad results of the socio-economic development of our country in 2016 and the most important economic directions for 2017, "... education, technology, science, realization of the state's success in youth, innovative aspects of education, including those who emphasized the need to pay attention to the issues of "introduction of information and communication technologies into educational practice".

Based on these considerations, paying special attention to the process of teaching physics in academic lyceums is one of the most urgent issues today. In the process of teaching physics, using modern technologies and organizing the lesson process helps to form the skills of students to apply the knowledge they have acquired in the field of science in practice.

A physics teacher must have the ability to use innovative technologies.

In the literature, "innovation (eng. innovation - created newness, invention) - funds allocated to the society and economy to ensure the replacement of generations of production, technology and technology with modern ones; "News related to scientific, technical and technological achievements and experiences in areas such as advanced equipment, technology, production management and personnel organization, as well as their application in various fields and professional spheres of activity".

Birth of a new idea in pedagogical literature; discovery, i.e. development of innovation; spread the news; introduction of innovation; the dominance of innovation in the concrete sphere; In connection with the emergence of another innovation, such problems as the increase in the scope of application of this innovation are noted.

It is of great importance to use in practice a number of properties of substances found in the environment and in technology in connection with their strength, elasticity, melting and solidification, and temperature, heat variability. Molecular physics is a branch of physics that examines the properties and structure of substances in different aggregate states. Creative thinking activities of students will be improved based on the organization of a virtual laboratory in the teaching of this department of physics to academic lyceum students.

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In the publication "Physics Teaching Methodology" created by N.S. Matjanov, the tasks, purpose, history of the science of physics teaching methodology, the history of the emergence and development of the science, the methodology of solving problems in physics and astronomy, innovative methods in teaching physics, the integrative connection of physics, the organization and conduct of independent education from physics. , the methods of organizing educational physics experiments and demonstration experiments are described

In the research work of Sh.I.Mamaradjabov on the topic "Investigating the possibilities of interdisciplinarity in the process of teaching physics (in the case of multi-vocational colleges in the field of medicine)", the study of physics in harmony with educational materials of multidisciplinary content is aimed at implementing its integration (interdisciplinarity) orientation to multidisciplinary disciplines. A number of school systems have been developed. This system, which has been developed and tested in practice, opens up the possibility for pedagogues to in-depth mastery of technical sciences in the process of teaching physics and creates conditions [5] S.S.Sheraliev-doctor of Philosophy in Pedagogical Sciences (PhD) in his scientific work entitled "Development of the content and methodology of electronic manuals for teaching the physics section "Vibration and Waves" to students (in academic lyceums)" pedagogical-psychological (creative, individual mental) in the theoretical acquisition of physical knowledge of academic lyceum students , intellectual) didactic (activity-motivational, active-exploratory) and technical (video tape, animations) students' electronic learning vocitas in teaching physics were improved. Teaching the physical phenomena and processes related to vibration and wave dynamics in research (the process of relaxation in nature, the force of repetition, spreading in space, freedom and elasticity), creating didactic exercises (contract-pair, analogy, integration (interdisciplinary communication)) aimed at increasing the cognitive motivation of academic lyceum students. acocida improved [6].

G.M.Sherailakov's diploma work "Development of creative activity of students in the performance of noctandart laboratory exercises from physics at school" innovative collaborative teaching as an organizational-team component of the functional-systemic model of improving the creative thinking activity of students in physics teaching and noctandart laboratory exercises group debates, individual learning, performing laboratory work divided into small classes), the cognitive (increasing interest in science and increasing the need) response to the activity of physics education, which reflects the cognitive, individual response, is shown in the decision-making process [7].

In the above-mentioned research works, the theoretical basis of the use of the possibilities of innovative educational technologies and the use of information, communication and

pedagogical technologies in the educational process to improve the knowledge of the subject and the creative activity of academic lyceum students as defined in the GS in the teaching of physics. Therefore, it is necessary to improve the process of formation of students' knowledge, skills and qualifications in science by using modern educational technologies in teaching physics in academic lyceums.

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