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USING OF THE NEWTON'S SECOND LAW IN HYDRODYNAMICS

The transmission from generation to generation a great scientific heritage (natural knowledge) accumulated by mankind from the time of its existence, is one of the most important objectives of physical education. The study of physics is the process of mental functioning human activity, characterized by a high level of logical thinking, ability to integrate elements of got information in a relatively complete theory. This fact requires from the teacher improving the level of motivational activities. The motivation aspect is an essential factor of activation of pupils to perception and mastering new information. The especial meaning has the study of material that has a low level of visual representation. The task of a teacher is to show and deeply convince subjects of study in necessity of learning the theoretical foundations, direct narrative, message on the base of examples. The using historical material in most cases is an integral part of the content and process of physics teaching. Sources of information that are available to business training, in most cases devoid of historical facts that are quite interesting for pupils and students and at the conditions of their using liquidate gaps in knowledge, expand the understanding of physical picture of the world. So there is a necessity to spread this information for all study subjects .

Using by physics teacher the principle of historicism in the educational process is not only increases the efficiency of learning, but also increases the importance of physical science in students' knowledge, that gives the impulse which motivates pupils and students to study physics. Using historical component in the content of physics teaching is considered in works of P. Atamanchuk, A. Bugayov, M. Golovko, S. Goncharenko, V. Ilchenko, L. Klimenko, E. Korshak, O.Lyashenko, M. Martynuk, B . Moschansky, A. Pavlenko, T. Popov, M Sadovoy, M. Shut.

The purpose of the article is to show ways of improving the scientific of teaching school physics course by clarifying some historical facts on the base of displaing the meaning and role of using the Newton's second law in hydrodynamics.

Newton's Second Law was the basis for many technological advances over time. He formed the foundation of many methods of research in different fields of science. Pupils and students must know the importance and role of fundamental laws of dynamics and especially measures of using the Newton's second law. The giving material allows to define ways of improving the scientific of teaching school physics course by clarifying some historical facts, but also to supplement the content of the course of physics history.