

# PHYSICS. DIALOGIC TEACHING OF THE COURSE

Tsotsko V.I.<sup>1</sup>, Denysenko O.I.<sup>2</sup>

<sup>1</sup>*Dnipropetrovsk State Agrarian and Economic University, Dnipro, Ukraine*

<sup>2</sup>*National Metallurgical Academy of Ukraine, Dnipro, Ukraine*

Teaching the course of physics should be in line with modern creative forms - intense, dynamic and bright.

The birth of thought and new knowledge requires a certain conflict, a clash of characters. It is not an overstatement to say that a great number of monographs were written by a team of contributors, for example, the Course of Theoretical Physics, a classical textbook on theoretical physics, was written by L. Landau in collaboration with his student E. Lifschitz.

According to the great physicist and Nobel laureate R. Feynman, the best teaching can be done only when there is a direct individual relationship between a student and a good teacher—a situation in which the student discusses the ideas, thinks about the things, and talks about the things. It can be added that it is a good idea for a student to find out the opinion of another teacher alternatively, as well as to listen to the dialogue between two teachers.

An interactive, dialogic form of teaching is offered, when two or even several teachers give classes by delivering the material through discussion, clarifying and supplementing it with new elements, exchanging ideas and entering into polemics. Students are encouraged to take part in the discussion, ask questions and put forward their own counterarguments. Of course, it is necessary to prepare well for such classes and they should be pre-announced. But how interesting it is to be a character in the play and not just a raw material for the replication of knowledge!

The idea of dialogue as a means of teaching is a kind of extrapolation of pair commenting of sporting events or modern interactive news or cultural television programs that have raised their expressiveness by several orders of magnitude. Such form of teaching makes it possible to invite bright personalities, such as scientists, experienced practitioners and experts, to visit the class which will arouse even more interest for learning in students.

The dialogic form of teaching has a number of advantages.

Errors in the delivered material virtually disappear. The depth and scope of the acquired knowledge increase. A multifaceted approach to solving a problem is implemented, new ideas are generated and thinking is activated. The variety of accents in the knowledge system leads to an understanding of the variability of the natural phenomena and the development as such. In dialogic teaching, a competition of personalities is simulated and a real process of improvement of teaching takes place. The students are faced with the issue of freedom of choice of information.

The dialogic form of teaching is more costly of course, but it is worth it for the sake of increasing its expressiveness and attractiveness of learning, and improving the quality of studies.