**Liusya Begragyan. Methods of studying physics and ways to improve them.**

Liusya Begragyan. Methods of studying physics and ways to improve them.

One of the most relevant problems of the present system of education is changing the teaching model according to the requirement and direction of modern science. Special attention is paid to the study of physics at school, because physics together with other subjects contributes to the formation of basic competences.

Methods of physical education and physical researches remain one of the most important and promising directions in the field of educational research to improve these methods. In our paper, we aimed for the first to explore the modern world experience of teaching physics, and secondly to provide recommendations for its adaptation to the domestic system of education.

Exactly because of scientific physical experiment the activity approach to the teaching of physics realizes more efficient. In the physical experiment system, special place belongs to the laboratory works, which provide practical training of students. The laboratory work generalizes student’s experimental skills.

The problem of involvement of students into the learning process has been investigated by several scientists, like Robert J. Beichner, E. F Redish., Edward F. Hammer, David Hestenes, R. Henderson and Kathleen A. Harper some other Ukrainian researchers whose works we reviewed for our investigation.

The selection of the pedagogical strategy depends on the concept, why it is necessary to educate as well as on the interests of the current generation of students. Now it is not enough only lectures, demonstrations, and experiments tools. Pupils have reached another level of perception and motivation in terms of total computerization and internetization. The teacher should reorganize their activities, according to new requirements, and the result will exceed all expectations.

We have identified 8 directions of physical education research which is based on the research that have been done by Robert J. Beichner and also we presented analytical results of our educational experiments. Then we suggested one example of a integrated approach to the study of physics that gave the high quality results of students’ knowledge and recommend to consider the results of our experiments and researches of the American scientists in the planning of the physics lessons and laboratory works for high school students. The further development of the theme can improve the nowadays educational system.