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THE THEORETICAL SIGNIFICANCE OF DEVELOPING LOGICAL THINKING SKILLS AMONG FUTURE PHYSICS TEACHERS

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Abstract
The article provides methodological recommendations for developing logical thinking abilities among future teachers of physics pedagogical universities. These recommendations provide for expanding the knowledge of students without education.

Keywords: physics, knowledge, competence, skill, logical thinking, abilities.

Introduction

Today, integrative models of the pedagogical process, aimed at improving the theoretical and practical foundations of the use of advanced innovative technologies, are widely used in the educational process in higher education institutions around the world. In the process of logical thinking of future physics teachers, an important place is occupied by the development of thinking and thinking abilities.

It is important to develop thinking and reasoning in future physics teachers in the process of logical thinking. The role of exercises for analysis and summation, comparison, generalization, determination of cause-and-effect relationships, classification and systematization in the development of the thinking abilities of future physics teachers is incomparable.

The stages of cognitive activity and their tasks should be taken into account when developing logical thinking skills of future physics teachers. As a result of mental thinking, the student must apply the acquired knowledge in practice. Only then can logical thinking be effective.

The development of logical thinking skills of future physics teachers is an important and valuable area of education in Uzbekistan within the framework of global education and serves as the basis for raising a comprehensively developed and perfect personality. Modern design of physics classes, their planning, organization, control and management, as well as a radical change in the quality of education, ensuring the effectiveness of this process, through the introduction of advanced teaching methods using modern pedagogical and information and communication technologies. students achieved.

Research in physics education is needed to develop logical and creative thinking. We can talk about some of the most general methods of logical thinking and, in general, general algorithms of mental activity. But this requirement also implies that future physics teachers must be able to conduct active research and find heuristic solutions. The desire for consciousness is a character characteristic of every future teacher, cultivated by the method of educational work.

If physics lessons are properly organized and harmonized with the education system, it will be possible to organize complex work that meets the requirements of our time. To do this, it is necessary to create a continuously programmable education system. The importance of physics classes in the preparation of future physics teachers and in the formation of logical thinking in secondary school students is significant. When performing these tasks, much attention is paid to modern pedagogical technologies, therefore the use of innovative methods in the development of creative abilities and logical thinking skills of general school students is of particular importance. The effective implementation of the

educational process is largely determined by the level of pedagogical technology, including computer literacy, of the teacher of the educational institution.

In the process of developing the ability for logical thinking in future physics teachers, work is carried out to develop the attention and memory of students, as well as to develop their effective thinking skills. The development of students' thinking and reasoning in the process of logical thinking is important for future physics teachers. In developing the thinking abilities of future physics teachers, it is necessary to observe and analyze exercises and phenomena related to analysis and summation, comparison, generalization, determination of cause-and-effect relationships, classification and systematization, and dependence of the phenomenon being studied. to other phenomena, students' understanding of phenomena and laws. It is important to develop methods of experimental verification.

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