

The Importance of Basic Competences in Professional Teaching of Physics in General Secondary Schools

Muhammadova Dilafruz Akhmatovna

Teacher of the Department of Physics, Faculty of Physics and Mathematics, Bukhara State University.

dilafruzmammedova053@gmail.com,tel:(91)445-56-55

Rustamova Rukhshona Aminjonovna

Student of Bukhara Institute of Engineering Technology

rustamovaruxshona88@gmail.com,tel:(91)820-97-57

Abstract

In the article, the importance of basic and subject-related competencies in solving the problem of professional orientation of teaching Physics is revealed. In addition, it was discussed that practical creativity is necessary for students to explain the nature of physical processes occurring in nature, and to use the knowledge gained from physics in everyday home conditions.

Keywords: ecological, physics, engineering, labor, competence, technology, trigonometric function.

INTRODUCTION

After gaining independence in the Republic of Uzbekistan, major reforms were implemented in the field of education as well as in all directions. The laws "On Education" and "On the National Personnel Training Program" are among them.

The state educational standards envisage the formation of basic competencies and general competencies of students. Basic competences are abilities, skills and types of activities that a person should have in order to live successfully in society, regardless of the profession. This means that every person should be communicative, able to work with information, develop himself as a person, be a socially active citizen, have general cultural qualities and be mathematically literate.

As a result of the rapid development of science and technology, we will have to thoroughly study physics and create innovations. For this, it was necessary to significantly increase the level of the educational process, to ensure that students thoroughly master the fundamentals of science in the teaching of general professional subjects to young people, to form such qualities as faith in their profession, moral purity, love for our country and its future. It is necessary to educate in the spirit of a perfect person who is ready to contribute.

In the teaching of physics as a subject, professional guidance serves as one of the goals of teaching and as an important factor in improving the quality of knowledge. Professionally oriented teaching of physics not only increases professional agility, but also allows students to develop their spiritual strength and abilities, to form in them such qualities as a scientific outlook and a positive attitude.



Vocational training is also based on didactic principles. Vocational teaching of physics is mainly "demonstrational" because its source is technical objects. Because of this, the successive implementation of the polytechnic principle in physics teaching, along with the enrichment of the tools of the demonstration principle, imposes specific requirements on teaching equipment from physics.

Vocational training is formed and clearly manifested in labor and production-technical activities of a person. Therefore, the production of teaching and the connection with the work of students serve as a necessary condition for their assimilation of knowledge. Preparation of students for the profession is carried out in the process of learning the basics of science, labor education, in extracurricular activities on technique, technology and social-useful, production work.

LITERATURE ANALYSIS AND METHODOLOGY

The problem of professional orientation of teaching physics is especially relevant today, because there is no field in which technology has not penetrated.

The laws considered in the study of physics require the introduction of technical applications in important areas of the national economy. This allows you to determine the theoretical and practical parts of the physics course.

Part of the students who graduated from secondary general education schools go to the production sector. In this regard, they must have received labor education. The physics teacher also participates to a certain extent in solving the issue of labor education. The purpose of labor education is to educate young people in the spirit of love and respect for colleagues and work teams, to prepare them to perform necessary and useful work for society, to prepare them from a young age to have a sense of responsibility for the result of work, to put the interests of the team above their own interests, and to achieve feelings of creative attitude to work. consists of If training is combined with production work, it will give good results.

RESULTS

Labor education is one of the main goals of secondary general education schools. It is necessary to actively participate in the implementation of all subject teachers in secondary general education schools. A physics teacher should not only teach the basics of science in every lesson, but also implement labor education.

The polytechnic principle is the principle that determines the work method of the physics teacher in terms of labor education and career orientation of students. A physics teacher should be able to make students interested in his subject in his classes it is necessary, otherwise, no matter how beautifully he talks about the scientific foundations of modern production, about innovators and creators, the student will not develop a creative attitude to work. Another important task of physics teachers working in secondary general education schools is that they should be able to show in their lessons how necessary physics is for students' future work activities through concrete examples and demonstrate these through experiments. will be In this way, the teacher can increase students' interest in physics, as well as instill a sense of love for their profession. It is necessary to organize physics teaching in such a way that the students are convinced that the factor determining the development of technology is the laws of physics.



DISCUSSION

Uncovering the humanitarian essence of science, that is, using its achievements for the welfare of the people, increases the polytechnic level of students and the effectiveness of their work on career guidance.

Learning physics does not only rely on students' previous knowledge of physics, but also on their knowledge of social and natural sciences. For example, from a mathematics course to study mechanics, vibrations and waves, trigonometric functions, from a chemistry course to study the phenomenon of electrolysis, atomic and nuclear physics, from a history course to explain the doctrines of heat and electricity, from a history course on industrial requirements in the 19th century. The knowledge gained from geography is used in the study of data, atmosphere, convention, earth magnetism phenomena.

CONCLUSION

The teaching of physics in secondary general education schools requires a high level of knowledge and pedagogical skills from the teacher. Vocational training is of great importance in increasing students' interest in science and ensuring that they can use the knowledge they have acquired during the lesson in their work activities in the future.

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