Professionally-Oriented Training of Physics Teacher by Method of Using Information Technologies Means

*Key words: information and communication technologies, pedagogical activity, training, computer, method, pedagogy, innovation.* 

**Annotation:** In this article, questions of professionally-oriented training of physics teachers in the methods of using information technology tools are considered. Proposals on an integrative approach to improving the quality of education in the system of higher education are presented.

A feature of the modern school is its functioning in the conditions of a rapid growth in the volume of educational resources. The schoolchildren do not always manage to get high-quality educational services in the traditional education system due to its limited information capacity. At the present stage of scientific and technical progress, in the transition to the information society, the school faces an important task - providing students with the conditions for realizing their potential opportunities in various fields of knowledge.

The modern period of the development of society is characterized by a strong influence on it of computer technologies that penetrate into all spheres of human activity, ensure the dissemination of information flows in society, forming a global information space. An inaccessible and important part of these processes is the computerization of education.

The need to design a teacher training system in the field of methods of using information technology tools is reflected in a number of normative documents, in particular, in the decrees of the President of Uzbekistan.

To date, such concepts as innovation, innovation, innovation are divorced, but, nevertheless, they all rely on tradition and the more traditions, the more innovation. What is innovation? If we turn to modern pedagogical literature, innovation is a change that improves, develops, improves educational practice.

Physics is far from the only science, the study of which is accompanied by a large number of experiments, experiments, formulas, laws, familiarity with outstanding scientists who have contributed to science, and physical laboratories, with all our efforts to keep the defense, are either morally deprecated or morally obsolete. This leads to the fact that the didactic principle of visibility is not fulfilled. This problem is successfully solved with the help of computer technologies.

The emergence of a large number of software and hardware designed to solve professional problems in different industries required appropriate training of graduates of pedagogical universities.

The introduction of any innovations entails the need to identify and justify new professional tasks, including in the use of new information technologies, which in turn affect the design of specialized training. The lack of clear requirements in the classification characteristic of the technology teacher to the level of his information training proves the need for professiographic analysis of pedagogical activity in the field of methods of using the teacher of new teaching aids in order to identify specific actions and tasks.

Thus, the analysis of the study of the problem of informatization of the educational sphere, the current state of the use of new teaching aids in the school, the study of the practice of methodical training of teachers of physics in the field of information technologies in various universities of the country made it possible to identify the following contradictions:

1. Between the content of professional tasks and the functions of physics teachers who, under the influence of the informatization of education, constantly acquire new qualities and the existing system of training a specialist in the field of information technologies, which does not orient future teachers towards an innovative approach to their solution;

2. Between the requirements for a graduate of a pedagogical university in the field of skills to solve complex professional tasks using medium-sized information technologies and the existing information training of students, which is generalized, which is carried out without taking into account the specifics of the future professional activity of the physics teacher.

Computers and information technology in general - a convenient tool that, if used wisely, can bring an element of novelty to the school lesson, increase students' interest in acquiring knowledge, and make it easier for the teacher to prepare for classes. Unfortunately, for the time being, the role of the computer is often reduced only to the possibilities of an unnecessarily expensive typewriter. But for this there are objective reasons: not all teachers are sufficiently proficient in computer skills. And yet the computer should become an integral part of any cabinet, like a board and chalk. The latter, by the way, in a number of offices should be superseded by modern means of screen video projection. It is easy to imagine a lesson in which the teacher, using special computer pointing devices (from the simplest mouse to a computerized laser pointer), demonstrates to the students a specially selected series of training video fragments, three-dimensional models, computer experiments and so on. Fantasy is a long time no longer seems, just for the introduction of such technologies in the ordinary school lesson requires a lot of work of the teacher - enthusiast, organizational assistance to the administration and material support of the state.

Showing lessons using information technology is always a bright spectacle, which is expected not only by students but also by teachers, especially if it is possible to present it in the right light, if all the details are invented, interesting interesting original materials are used, resources are used intellectual and creative students of educational institutions. And there is no doubt that it is precisely such a training organization, in which besides not less important classical lessons integrated lessons are introduced with the use of information technologies, will educate educated, intelligent and creative people.

In conclusion, we can say that if the methodology for training a teacher of technology in the use of new information technologies in education is developed on the basis of:

- the identification of new professional pedagogical tasks of the teacher arising in the context of informatization of the educational process and influencing the content of its preparation;

- establishing the relationship between the fundamentality and professional orientation of information as part of the subject and methodological training;

- accounting within the professional differentiation characteristic of the technology teacher's activity, this will help to improve the level and quality of students' preparation for solving professional pedagogical problems using the means of new information technologies, while the efficiency can be estimated by such criteria as the level of mastering the professional knowledge and skills, motivation and degree of readiness for innovative activity through the manifestation of independence and creative activity.

## References:

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