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**INFORMATION AND COMMUNICATION TECHNOLOGIES AS ONE OF THE MEANS OF REALIZATION OF SCIENTIFIC AND RESEARCH ACTIVITY OF STUDENTS OF PHYSICO-MATHEMATICAL FACULTIES**

**Abstract.** The content of this article is devoted to the problem of organization and development of scientific-research activity of students of physical and mathematical faculties through the use of information and communication technologies. The publication examines the experience of Russian and foreign scientists and teachers-practitioners introduction in educational process of high-quality and efficient technologies that will facilitate the research activities of modern students. Examines the main trends of the organization and intensify scientific research of students in European higher education. Characterized by two main types of research activities of students. On the basis of generalization of certain experimental data highlighted the possible levels of self-realization of students in the teaching and research activities. The article presents the organization of scientific-research work of students in non-academic activities as one of the most important means of formation of a highly qualified specialist, in particular natural-mathematical profile. In addition, the publication contains the characteristic features of some important forms of scientific research activities of students outside of school hours, which are presented for better understanding, in table form, where the possible participants of the research activities, basic functions and principles, and identified their positive traits.

The publication describes the possible solution of the problem of intensification of scientific work of students by introducing information and communication technologies, which in turn stimulate the interest of students to learning and contribute to the preparation of future teachers of physics and mathematics to innovate and develop further independence in the implementation of research activities.

The article presents the description of some information and communication technologies and identifies their role in the research activities of students of physical and mathematical profile. In addition, it is determined that the types and forms of research work of students on the basis of information and communication technologies enjoy substantial popularity and with a clear scientific justification can improve the process of research activities of students of physical and mathematical faculties and outlined the prospects for further research.

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