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IMPROVING THE POSITIVE COMPETENCE OF FUTURE INFORMATICS TEACHERS THROUGH MODERN INFORMATION TECHNOLOGIES

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Abstract
Currently, the process of digitization in education is progressing at a rapid pace. In particular, computer science teachers - as specialists who arm the future generation with digital knowledge - need to know modern IT tools and use them effectively. A teacher should not only be a provider of knowledge, but also a mentor who teaches students to think independently and find creative solutions. This requires the development of positive competence of the teacher. Interactive platforms, virtual laboratories, artificial intelligence-based educational programs and online resources allow computer science teachers to organize the learning process more effectively. In today's labor market, IT knowledge and digital competencies are considered one of the key skills. Future computer science teachers themselves must have knowledge and practical skills in this area. Therefore, this article is relevant.

Keywords: Technology, competence, informatics, digital literacy, interactive, innovative.

Introduction

In today's era of globalization and digitalization, training highly qualified, innovative teachers in the field of education is becoming one of the urgent issues. In particular, the need to form and develop positive competence in the professional training of future teachers of computer science, and to strengthen their skills in the effective use of modern information technologies is increasing day by day.
Information and communication technologies (ICT) have become an integral part of today's educational process. With the help of these technologies, the opportunity

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to improve the quality of education, develop interactive and creative approaches, and form independent thinking and information analysis skills in students is expanding. In particular, the digital literacy and pedagogical skills of computer science teachers can be more effectively developed through the use of modern information technologies in the educational process. In this regard, the use of modern information technologies in the process of forming positive competence of future computer science teachers serves as an important factor in increasing their professional potential and introducing an innovative approach to the educational process. This topic is a topical issue that requires in-depth scientific and theoretical study and the development of practical solutions.

The development of positive competence of future computer science teachers and the use of modern information technologies in this process is considered one of the most relevant and promising areas of education today. A number of scientists have conducted theoretical and practical research on this topic. It is emphasized in various sources that the concept of pedagogical competence is closely related to the teacher's professional knowledge, skills, moral values, and creative approach [1]. In particular, in computer science, this competence includes not only traditional knowledge, but also skills in working with modern digital technologies, algorithms, programming, and networks. M. Qurbonov and S. Toshpulatov [2] emphasize the role of modern information technologies in the educational process in their research: “ICT serves as the main tool for improving the teacher's professional skills, organizing the educational process interactively and effectively, and increasing student activity.” Also, V.V. Grinshkun and in his research, A.V. Khutorskoy [3] developed a model for the formation of modern digital pedagogical competencies for computer science teachers, which allows teachers to strengthen skills through practical tasks, design and organize lessons using innovative technologies.

The Resolution of the President of the Republic of Uzbekistan No. PQ-3959 of September 5, 2018, established the introduction of digital technologies and the development of ICT competencies in the education system as a priority area of state policy. This document serves to encourage computer science teachers to master modern technologies and apply them in practice[4].

The issue of using modern information technologies in the development of positive competence of future computer science teachers is being studied from a scientific,

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theoretical and practical perspective. The methodological basis of this study is the principles of modern pedagogy, didactics, information and communication technologies and the competency approach.

As a result of the conducted questionnaire and interviews, it became clear that the majority of future computer science teachers have the necessary theoretical concepts on the use of modern information technologies. However, certain shortcomings were observed in the effective and methodological use of these technologies in the educational process.

During the experimental and testing processes, students were given special methodological instructions and practical tasks aimed at using information technologies. As a result of this approach, a significant increase in students' knowledge and skills was noted.

Also, the results of the lessons organized using modern information technologies in the experimental group showed that they served to improve the analytical thinking skills of teachers, independent decision-making skills, and the ability to apply modern pedagogical technologies in practice[5-6].

The results of the study confirmed that the effective use of information technologies plays an important role in developing the following positive competencies of an informatics teacher:

— culture of working with information;
— designing the educational process based on an innovative approach;
— forming independent research skills in students;
— skills of analyzing and visually presenting information.

In conclusion, the results of the study clearly demonstrated that the effective use of modern information technologies is an important factor in the formation of positive competence of future computer science teachers. During the study, it was found through questionnaires, interviews, and experimental testing methods that, although future teachers have general knowledge of the use of modern information technologies, they face certain shortcomings in the skills of their effective and methodologically sound application in the educational process.

During the experimental testing, as a result of providing students with training based on special methodological instructions and tasks aimed at the use of modern information technologies, significant positive changes were observed in their professional competence. In particular, skills such as information analysis, visual

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presentation, independent decision-making, and designing the educational process based on an innovative approach were developed.

The results of the study confirmed that the effective use of information technologies in the process of training computer science teachers serves to form the following positive competencies: a culture of working with information, independent research skills, the ability to apply modern pedagogical technologies in practice, and the ability to think innovatively. On this basis, it can be said that the purposeful and methodical use of modern information technologies is an important and effective means of improving the level of professional training of computer science teachers[7-10].

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