Development of Professional Competence of a Future Computer Science Teacher Based on An Information Technological Approach

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Abstract: The article presents the concepts and directions of the professional competence of a computer science teacher and that in the conditions of the high dynamism of the national education system, its inclusion in the world educational space, the quality of a teacher's professional activity depends on the level of formation of his professional competence, which ensures the achievement of strategic objectives in professional activity.

Introduction: The current stage of development of education is characterized by a constant increase in the requirements for its quality, for the compliance of educational results with the needs of modern society. The problem of transition to new educational results is global and common for many countries. For Uzbekistan, such a transition is further complicated by the fact that the modernization of education and orientation to new educational standards are carried out in parallel with the changes taking place in the socio-economic sphere of society. The research and practical experience in the pedagogical university allow us to conclude that in the conditions of high dynamism of the national education system, its inclusion in the world educational space, the quality of the teacher's professional activity depends on the level of formation of his professional competence, ensuring the achievement of strategic objectives in professional activity.

Today, the most relevant will be the integration of fundamental professional basic knowledge with innovative thinking and a practical research approach to solving many educational problems. That is, within the framework of professional training of teachers, it is important to cultivate in students the desire to grow professionally and look for innovative, non-standard ways to solve professional issues, including using information technology. The study of the structure and content of the professional activity of a teacher in order to determine the required level of his/her professional competence as the basis for effective work in modern conditions is a rather urgent task that arouses the interest of many scientists and researchers. In psychological and pedagogical literature, the mass use of the term "competence", which replaced the concepts of "qualification" and "professionalism", began relatively recently. Thus, in the late 1960s - early 1970s in Western, and in the late 1980s in Russian literature, a special direction arose - the competence approach in education. Researchers mainly began to turn to the professional competence of a specialist as a pedagogical problem in the 80s - 90s of the 20th century.

As the study of literature shows, the research of this concept and its characteristics is conducted in different directions. In general, in pedagogical science the concept of "professional competence" is considered as: a set of knowledge and skills that determine the effectiveness of work; the volume of skills for completing a task; a combination of personal qualities and properties; a complex of knowledge and professionally significant personal qualities; the unity of theoretical and practical readiness for work; the degree of a person's involvement in an activity; the ability to perform complex culturally appropriate types of actions, etc. Thus, for example, A.K. Markova implies competence as a certain mental state that allows one to act independently and responsibly, as a person's

possession of the ability and skill to perform certain work functions. [1] The interpretation of the concept of "professional competence of a teacher" has become the subject of dispute and disagreement between psychologists, educators, physiologists, practical specialists, etc., and there is still no unambiguous definition. In this case, the phrases "professional-pedagogical competence", "professional competence of a teacher", "professional competence of a teacher", "pedagogical competence" belong to the same synonymous series. Thus, according to V. A. Adolf, "professional competence is a complex formation that includes a set of knowledge, skills, properties and qualities of a person that ensure variability, optimality and efficiency of the construction of the educational process". [4]

We consider professional competence as an acquired system-forming integral quality of the individual, the basis of which is scientific knowledge about objects, subjects, dynamics and content of professional activity, general subject and special skills and abilities, experience, business and personal qualities of the individual. That is, it is simultaneously a specific state of the individual, ready to implement the acquired knowledge in specifically defined conditions of practical activity, and an element of professional culture, and the main component of professionalism. At the same time, the activity of a specialist in solving professional problems should be organized and independent.

Returning to the issue of defining the professional competence of computer science teachers, it can be noted that in its structure, competencies related to information and information processes and technologies, for example, information competence or ICT competence, play a special role. Thus, information competence is understood by us as the ability of an individual to navigate the flow of information, as the ability to work with its various sources, to find and select the necessary material using various technical means, to classify it, generalize, analyze it, and also as the ability to specifically and effectively solve emerging professional and everyday problems based on the knowledge gained. We define ICT competence as the ability of an individual to competently and creatively use information and communication technologies in professional activities, in the learning process, during preparation for classes, as well as to solve everyday issues. However, despite the globalization of informatization of education, the role of a computer science teacher in educational institutions is not limited to using information and communication technologies in their educational process.

The study of specialized literature and the conduct of the research allow us to conclude that at first the basic, minimum necessary general professional knowledge, skills and abilities are acquired and formed, on the basis of which basic professional guidelines are then built, subsequently turning into readiness for professional implementation and self-development of the individual. That is, basic competence is the basis for the formation of general, which in turn is the necessary basis for the formation of professional competence. It is also necessary to remember that the system of training a future computer science teacher in modern conditions should be focused on fulfilling a certain set of requirements for a graduate of a pedagogical university, which should be appropriately reflected in the educational process. For full preparation of a computer science teacher for work in a modern information technology society, it is necessary that the learning process at the university also takes place in a new information and communication educational environment using ICT tools that promote the activation of cognitive activity and the development of creative abilities of students, readiness and desire for self-development. Thus, the system of training a future computer science teacher as a competent specialist should be designed and implemented as an open system ready for further improvement. The basis of such a system should be its orientation to a dynamically changing reality, to constant and continuous development. No matter how high the theoretical and practical training of a teacher is, a modern teacher is obliged to constantly and continuously improve his professional competence. The preparation of a computer science teacher for work in modern conditions of the information environment should be focused not only on solving the problems that arise before the teacher today, but also on the readiness to solve problems that are not yet familiar to him, but may appear in the future. Therefore, the goals, tasks, means, forms, mechanisms and methods of interaction between a university teacher and students should be determined in such a way that the considered concept of professional competence becomes important and valuable, if not for everyone, then at least for the majority of future specialists.

REFERENCES

Markova A.K. Psychological analysis of professional competence of a teacher // Soviet pedagogy. 1990. No. 8.

Juraev R.Kh., R.Torezhanova Competence-based approach in the modern education system.// Harmoniously developed generation is a condition for stable development of the Republic of Uzbekistan/ Collection of scientific and methodological articles. UzNIIPN. 2017. Part 19.

Juraev R.Kh., D.Mazhidova How to prepare a teacher for professional activity// Harmoniously developed generation is a condition for stable development of the Republic of Uzbekistan/ Collection of scientific and methodological articles. UzNIIPN. 2019. Part 9.

Lotova I.P. Psychological conditions for the effectiveness of professional activity of a social service worker. -M .: Publishing house of MGSU "Soyuz", 1999.

Juraev R.Kh., D.Mazhidova How to prepare a teacher for professional activity// Harmoniously developed generation is a condition for stable development of the