



## The Role of the Formation of Information and Technical Competence in the Field of Professional Activity in the Production of Students of Applied Mathematics

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**Abstract:** this thesis talks about the role of information and technical competencies in the technological field of production according to the qualification requirements of students studying in the field of Applied Mathematics. According to him, the information and technical (general technical) competencies that make up information and technical competence were studied separately and a single general information and technical concept was developed.

**Keywords:** competence, competence, information competence, general technical competence, information-technical competence.

Currently, special attention to education by our state, improvement and modernization of the structure of the higher education system and implementation of informatization processes are among the main factors, while the direction of a competency approach in educational education of students is also one of the main factors. At the same time, a competency approach requires strengthening practical activities aimed at developing the ability to use scientific content in practical professional activities, the ability to solve professional tasks using modern means of informatization.

The rapid development of the process of informatization of Education assumes the introduction of new digital technologies in almost all spheres of modern human life. The use of modern digital technologies for the technological modernization of industry and production of the Republic and the development of technical means is a key factor.

Within the framework of a competency - based approach, the main guideline for solving the problem of the quality of general technical training of a bachelor of Applied Mathematics is the formation of information and technical competencies as an important component of professional competence.

The basic concepts of a competency-based approach are "competence" and "competence". These concepts have been used in our daily lives for many years, in the scientific literature, but we must come to a unified understanding for our scientific work from the presence of different views in the introduction of a competency-based approach to pedagogical practice.

The word competence in Latin means "competere", "erishyabman", "worthy", "worthy" [1]. It is used in many literature to mean "to compete", "to compete", "to compete", "to win", [2].

Pedagogical scientists of the Republic on the scientific-theoretical basis of training and development of future specialist personnel for professional activities R.H.Dzhurayev, N.A.Muslimov, Sh.E.Qurbanov, A.R.Khodjabayev, Z.K.Ismailova, Q.T.Olimov, O.X.Turakulov, S.Y.Ashurova, O'Q.Tolipov, Sh.S.Sharipov, M.B.Urazova, J.A.If studied by the khamidovs, then the future specialist is N. on the issues of development of professional competence in personnel. A.Muslimov,

D.O.Himmataliyev, Sh.S.Sharipov, O.A.Coysinoff, H.Q.Kadyrov, J.Turmatov, A.R.Jurayev, N.N.Research work was carried out by Karimova and other pedagogical scientists.

Pedagogical scientist N.A.According to Muslimov, “competence is determined by the use in professional activities of the knowledge, skills and qualifications necessary in maintaining the personal and socially significant professional activities of the Student [3].

The concept of “information competence” is much broader and is still not interpreted in the same way. At the current stage of the development of society, the field of use of information technology is actively expanding. Publicity affected all spheres of state and Human Life: economy, production, education, etc. With the study of the problem of the formation of information competence, representatives of various disciplines are engaged: philosophers, psychologists, teachers, sociologists.

The increased demand for the issue of the formation of information competence is associated with the informatization of the educational process, since information is one of the effective means of improving the higher education system. In the scientific literature, the concept of “information competence” is often considered in conjunction with the concepts of “Information Literacy”, “Information Culture”. There are different views on the definition of “information competence”, some of which we will get acquainted with.

Y.I.Askerko believes that information competence is an integral human trait that reflects the desire and ability to effectively search, collect, analyze, modify information and make the most of it in educational-cognitive activities [4].

N.V.Gafurova, A.D.According to the Arnautov study, information competence is the ability to consciously integrate information technologies into professional activities based on the analysis of the functional capabilities of computing devices and software products used to solve professional problems, combine various software products and computing devices [5].

From the above research on information competence, information competence shows the integral nature of an individual, which is formed in the process of acquiring a set of Bkms that he uses in professional activities, the ability to create, store and lengthen information using new digital technologies and technical means.

The second element of information-technical competence is the concept of general technical competence.

G.N.Stainov argues that general technical competence implies not only technical knowledge and skills, but also the presence of features in interdisciplinary mobility of the Graduate, such as the wide technical and technological worldview of the individual, communication, the ability to make independent decisions, the consistency and flexibility of engineering thinking in conditions requiring science [6].

V.V.Osipov and V.N.Khudyakov defines general technical competence as a single complex of knowledge, skills and qualifications of a student in the field of general technical sciences, as well as a measure of the formation of abilities and readiness for certain professional activities [7].

O.E.According to Noskova, information and technical competence is a dynamic personal quality characterized as the ability to use modern information technologies to solve engineering problems related to the development of a complex of general technical and information competencies, computing, research and its readiness to design, manufacture and solve professional problems of technical systems in the field of Agriculture [8].

During our research, the concepts of “competence”, “competence”, “information competence” and “general technical competence” and the interactions and relationships between them, as well as the experiences of research scientists, are introduced to the basic concepts of our research.

Information and technical competence of students of the field of Applied Mathematics is a dynamic personal quality of being able to use modern information technologies in solving engineering problems during their professional activities in production quarries and organizations [9,10].

The problematic aspect of the development of this competence is that students of the field of Applied Mathematics study only theoretical mechanics from general technical subjects, but such subjects as strength of materials, theory of machines and mechanisms, machine parts do not exist in the course curriculum. Theoretical mechanics is also the scientific basis of all technical sciences, without explaining many important phenomena around us. His methods and techniques are used in all technical calculations in the design of machines and structures. The study of theoretical mechanics is also of great importance in the development of professional thinking by a future engineer [11,12].

Thus, our research shows that in order for a student of the field of Applied Mathematics to be able to compete for the requirements of the labor market in the technological sphere of production, it is important that information and technical competence is formed in them.

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