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PROSPECTS FOR THE DEVELOPMENT OF INFORMATION-ANALYTICAL COMPETENCE IN TECHNICAL HIGHER EDUCATION INSTITUTIONS

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Annotation: This article explores the formation of information-analytical competence among students in higher technical education within a digital learning environment. Information-analytical competence is defined as the ability to effectively perceive, critically analyze, and apply information in practical contexts using analytical thinking.
Keywords:digital learning environment, information-analytical competence, analytical thinking, higher technical education, digital technologies in education, educational innovations, student competencies, virtual laboratories, electronic resources, interactive teaching methods.
Аннотация:В данной статье рассматриваются вопросы формирования информационно-аналитической компетентности у студентов высших технических учебных заведений в условиях цифровой образовательной среды. Под информационно-аналитической компетентностью понимается совокупность умений критически воспринимать, анализировать и применять информацию на основе аналитического мышления.
Ключевые слова: ицифровая образовательная среда, информационно-аналитическая компетентность, аналитическое мышление, высшее техническое образование, цифровые технологии в образовании, образовательные инновации, компетенции студентов, виртуальные лаборатории, электронные ресурсы, интерактивные методы обучения.

In Uzbekistan's new development strategy, preparing highly qualified, competitive, and globally minded professionals holds great importance. Globalization and competition are intensifying across all sectors, including education. This situation necessitates improving the quality of education and modernizing both the content and form of the educational process. Within the framework of goals set by President Shavkat Mirziyoyev, it is essential to train specialists who not only possess deep knowledge but also actively participate in socio-political processes. These professionals must be experts in their fields and contribute meaningfully to societal progress. An approach based on the principle of continuity in the educational process enhances the role and significance of each stage of learning. One of the most important tasks for higher education institutions is to prepare highly skilled, independent thinkers capable of solving real-life problems. In this process, the role of teachers is invaluable—no matter how advanced the curriculum or how modern the textbooks may be, it is the expertise of educators that ensures effective delivery of knowledge and the development of practical skills to students. Today, higher education institutions face broader responsibilities beyond teaching, including fostering self-development, encouraging innovative thinking, and enhancing students' ability to analyze and effectively use information.

Currently, the education system is built upon a competence-based approach. This approach focuses on shaping individuals ready for self-education, independent research, and creative activity. It emphasizes the alignment of theoretical knowledge, practical skills, and personal qualities necessary for success in professional life. The competence-based approach organizes all stages of the educational process into a unified system, ensuring stable and consistent quality of

education. At the bachelor's level, students acquire fundamental and general professional knowledge; at the master's level, they deepen their analytical and research capabilities.

In the modern digital society, information-analytical competence is not only an integral part of professional activity but also a key element of general cultural literacy. Students who do not fully master modern information technologies risk losing their competitiveness. Therefore, developing information-analytical competencies and integrating modern technologies into the educational process have become essential in higher education. Information-analytical competence includes the ability to search for, analyze, process, and extract useful results from data. Such competencies are especially crucial in training specialists in economics, informatics, and information systems. The decree signed by the President of the Republic of Uzbekistan on October 8, 2019, titled "On Approval of the Concept for the Development of the System of Higher Education in the Republic of Uzbekistan until 2030" launched major reforms in the field of higher education. The concept emphasized directions such as quality control in education and expanding international cooperation. These reforms aim not only to improve the quality of specialist training but also to ensure their professional independence and encourage scientific inquiry. A competence-based approach, promoting information literacy, and strengthening the role of educators play a vital role in training highly qualified personnel. Every educator and educational institution must implement modern and effective approaches in practice. This will ultimately help build a strong and developed society.

Assessment of information-analytical competence is based on analyzing contradictions in bachelor's and master's certification procedures. The modern education system aims not only to develop knowledge, skills, and abilities but also to cultivate independent use of knowledge, creative thinking, and problem-solving competencies in a rapidly changing information environment. Training competitive specialists capable of efficiently organizing information-based activities in technical higher education institutions requires a modern approach and defined methodological foundations. By conducting an in-depth analysis of the requirements for bachelor's and master's certification, the main contradictions in assessment methods are revealed. At the bachelor's level, standardized assignments and tests are primarily used to assess knowledge, skills, and abilities. These assessments are carried out based on criteria established in state education standards. Students are expected not only to absorb ready-made knowledge but also to develop higher-level creative skills such as independent analysis, comprehensive problem-solving, and conducting scientific research. Group and peer assessment mechanisms are also used at this stage. The evaluation process involves identifying the actual level of competence through collaboration between students, teachers, and employer representatives. Students write graduation qualification works aimed at solving scientific and practical problems relevant to their field of study. These scientific works focus on economic, analytical, and management-related information challenges, demonstrating the student's scientific research culture, information-handling competence, and intellectual independence. In modern scientific concepts, information activity is viewed not merely as a professional field but as a multidimensional capacity included in the set of concepts defining professionalism. Therefore, developing information-analytical competence among students in technical higher education institutions is recognized as one of the central directions of the educational process. Information-analytical competence is a complex quality reflecting a person's readiness to work consciously, critically, and creatively with information.

Analyzing problematic situations and determining their relevance. Formulating and substantiating scientific hypotheses. Independently mastering innovations and applying them in professional practice. Presenting scientific and practical results in various formats. Thus, the competency model developed for graduates of technical higher education institutions identifies information-analytical competence as its core. This model emphasizes not only technological

knowledge but also skills in critical analysis and innovative application of information. By developing information-analytical competence, technical specialists become successful professionals capable of working in information-rich environments, possessing creative thinking, and meeting global demands. In our opinion, the process of forming and developing professional competencies at different levels should be implemented consistently throughout bachelor's and master's degree programs in higher education. In technical higher education institutions, developing information-analytical competence today plays a special role not only in promoting knowledge-based learning but also in cultivating information-based thinking. Deepening this competence through technical disciplines is one of the most important aspects of specialist training. Technical disciplines serve not only as the theoretical foundation for professional preparation but also as a significant tool for developing intellectual and informational capacities. These subjects play an irreplaceable role in strengthening students' abilities to work with information, think systematically and critically, reason logically, simulate practical situations, and conduct scientific and creative research. Studying technical disciplines deeply ensures the transition from theoretical knowledge to practical application and integrates knowledge with design and modeling. In this process, an information-based approach helps shape a complex, multi-level, and component-based structure of information-analytical competence. Developing information-analytical competence must become an essential professional requirement in today's globalized and digitized society. Technical disciplines provide a favorable environment for forming and developing this competence. Using the proposed model, students' information abilities can be developed step-by-step, supporting their independent thinking and creative approach. This, in turn, contributes to effective collaboration between teachers and students, high motivation, and a continuously evolving knowledge environment. The advanced level of information-analytical competence indicates the formation of a student as an independent, creative, and analytically thinking individual. This approach is especially important in technical higher education institutions for training professionals with digital and scientific competence. Creating pedagogical conditions, applying interactive methods, and promoting scientific activity are essential in shaping students' scientific-information-analytical competence. This ensures that students graduate as knowledgeable, independent, and technology-savvy specialists.

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