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FORMATION OF STUDENTS' INFORMATION-ANALYTICAL COMPETENCE IN A DIGITAL LEARNING ENVIRONMENT

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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
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.

In the context of modern globalization and digital transformation, information technologies are becoming a key aspect of societal development. The advancement of information and communication tools presents new and complex challenges for higher education systems. In particular, the ability of graduates from technical institutions to effectively use modern computer technologies ensures their competitiveness and demand in the labor market. Considering that employer requirements increase each year, it is evident that information-analytical competence has become one of the main criteria defining a specialist's intellectual capacity.

Information-analytical competence does not merely imply the ability to use technical devices; rather, it also includes students' capability to independently solve informational problems, search for necessary data, analyze, systematize, and apply it. Such competencies help individuals continuously update their knowledge and support personal and professional development.

Thus, information-analytical competence is an inseparable part of general preparedness required for successful performance in the modern labor market. Competence is an integrated quality of a person manifested in their activities, formed on the basis of theoretical knowledge, practical skills, and life experience. It involves not only possessing knowledge but also applying it in specific situations and solving complex problems through an integrated approach. The formation of competence implies harmonious development of a person's cognitive (knowledge), affective (attitudes), and practical aspects. Professional skill, in turn, refers to a set of precise knowledge and skills needed to perform a certain type of activity. Therefore, competence, as a broader and deeper concept, also encompasses the ability to make effective decisions in complex situations. Today, higher education institutions are regarded not only as providers of professional knowledge

but also as significant social institutions preparing specialists with digital thinking and information literacy. As a result, there is an urgent need to reconsider the content of education, actively apply information and communication technologies, and pay special attention to forming and developing students' information-analytical competence.

A modern specialist should possess the following abilities:

- Independent use of information resources;
- Selection and evaluation of necessary data;
- Processing and storage of information in a digital environment;
- Effective communication with various information systems;
- Implementation of advanced information technologies in their professional activities.

To accomplish these tasks, universities must introduce special modules related to information literacy, digital thinking, information culture, and information security into their curricula. Information-analytical competence is not formed solely through classroom activities; one of its key factors is the effective organization of independent learning. This involves organizing the educational process around the student, engaging them as active participants, and cultivating independent thinking and a culture of working with information.

Unfortunately, many students lack sufficiently developed skills in working with information. They are unprepared to make independent decisions in problematic situations or to apply modern technologies in practical activities. This highlights the necessity for educational institutions to re-evaluate the level of preparation in terms of information-analytical competence. Success in the 21st century primarily depends on continuous education and the ability to work with information. A modern specialist must not only possess professional knowledge but also demonstrate information-handling culture, the ability to quickly absorb and apply innovations. Therefore, forming information-analytical competence in the educational process is both a requirement of the time and a socio-economic necessity.

In summary, against the backdrop of the development of information technologies, the need for forming and developing information-analytical competence in higher education continues to grow. The presence of this competence not only enhances the effectiveness of education but also guarantees the competitiveness of graduates in the labor market. In the future, modern society will require professionals who are informed, capable of critical thinking, and able to successfully operate in a digital environment. One of the main strategic tasks of universities should be the development of approaches aimed at training such specialists.

Modern information society introduces fundamental changes across all spheres of human activity. Thanks to rapid development of computers and information technologies, production, education, management, healthcare, culture, and other fields are being reshaped based on new technologies. This situation leads to increased demands on graduates of higher education institutions. Currently, modern employers seek specialists not only with professional knowledge and skills but also with high-level information-analytical competence.

Information-analytical competence is a comprehensive set of skills and abilities essential for a modern specialist. With this competence, a person can search for, analyze, systematize, create, and effectively apply information using modern information and communication tools in practical activities. Computer literacy, use of digital tools, selection of necessary information flows, processing, evaluation, and transmission abilities are all components of information-analytical competence. This competence is formed based on three core components:

1.Cognitive component–acquisition of theoretical knowledge in information technologies and digital tools;

2. Practical component–ability to work independently with data using information and communication technologies and to use them purposefully;

3. Professional application component–ability to directly apply this knowledge and skills in professional practice.

Modern society requires specialists who not only master existing knowledge but are also ready to update it, develop themselves, and think critically and creatively. This is especially relevant for those engaged in pedagogical activities. Higher education institutions must fulfill the task of preparing students for digital transformation by forming their information-analytical competence.

With the formation and development of the information society, the demand for the ability to work with information flows has significantly increased. In modern socio-economic conditions, a person must be able not only to rely on personal experience but also to quickly and efficiently receive, analyze, and process large volumes of information created by others. This process is particularly important for young people studying in higher education institutions, as they are expected to effectively use information technologies in their professional activities. Information-analytical competence has become an inseparable part of the modern educational process. Its formation is directly related to the objective process of informatization, which, in turn, leads to the transformation of the education system.

Developing students' information-analytical competence requires a comprehensive approach aimed at increasing the effectiveness of teaching using modern technologies. This activity is especially relevant for students studying in technical fields, as it determines the level of their future professional preparedness.

In conclusion, forming information-analytical competence, which is necessary for students in a modern digital learning environment, is one of the key factors ensuring their professional preparedness, independent thinking ability, and competitiveness. This article comprehensively discusses ways to effectively organize information-analytical activities based on digital technologies, pedagogical models and methods, and practical mechanisms contributing to the development of this competence.

Analyses show that rational use of digital learning resources, introduction of assignments encouraging critical and analytical thinking, and the formation of students' skills in searching for, evaluating, and effectively using information play an important role. Developing this competence not only improves the quality and efficiency of education but also strengthens students' abilities for independent study, problem analysis, and drawing scientifically grounded conclusions.

Based on this research, it was concluded that enriching the educational environment with digital tools in educational institutions and developing and implementing educational assignments aimed at forming information-analytical competence can ensure students' intellectual development. On this basis, forming information-analytical competence is considered a relevant and promising direction for improving the quality of education and preparing personnel meeting modern requirements in the context of an information society.

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