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**THE POSSIBILITIES OF A SYSTEMS APPROACH IN THE DEVELOPMENT
OF STUDENTS' INFORMATION COMPETENCE**

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Annotation. The article examines the role and possibilities of a systematic approach in the development of students' information competence. Today, information competence is becoming one of the main skills in the digital age. The ability to effectively find, analyze, and evaluate information is necessary to adapt to modern society. This includes not only technical skills but also the ability to search for information from reliable sources, think critically, and use information from an ethical point of view. In this regard, the development of students' information competence becomes an important task of educational institutions. It is obvious that students with a high level of information competence will also be successful in their studies and future professional activities. Therefore, the process of developing students' information competence should be carried out systematically and include various educational methods and techniques.

In accordance with the research topic, the article presents an overview of scientific research by domestic and foreign scientists. Based on it the author analyzes the effectiveness of a systematic approach in the context of the development of information skills and critical thinking of students. In the modern educational context, the importance of an integrated and systematic approach to learning is emphasized, contributing to the comprehensive development of students' information competencies. The results of the study provide opportunities and recommendations, considering the development of students' information competence as a comprehensively organized unified system.

Keywords: competence, information competence, system, approach, information literacy, systems approach.

The updates in the modern information space are bringing about changes in all areas of human life and society. It is characterized by the increased competence role of the future professional and special attention to its development. Not only does the system of specific knowledge, skills, and abilities become relevant, but also the presence of high qualifications and professional competencies among students. Therefore, it is important to develop the adaptability and teamwork skills of a future professional in the modern labor market, tolerance of emerging contradictions and relationships, an active creative attitude, competitiveness, and information competence.

Students' information literacy is a complex, multi-level education that requires comprehensive analysis.

Before we look at the term "information literacy competence" we should look at the definitions of the terms "competence" and "competency".

Competence (in Lat. *competentia* -belonging to the law) - knowledge, professionalism, experience in a certain field; in a broad sense: abilities, skills, and concepts.

Competence (in Lat. *competencies*- proper; capable) is a personality trait that characterizes a person's ability to realize their human potential in personality-oriented activities and professional activities, expressed in the ability to perform activities based on the acquisition of relevant competencies [1].

According to the state-prescribed standards for higher and postgraduate education, competence is the ability to practically apply the knowledge, skills, and abilities acquired in the educational process in professional activities [2].

In scientific research, the concept of information literacy is viewed from different perspectives and is understood as knowledge, skills, abilities, and working methods in the field of information technologies that are geared toward solving professional tasks.

Researcher E.F. Morkovina came to the following conclusion: "Information literacy competence of a student is a professionally important integrated quality of a person, which describes the degree of acquisition of a set of competencies necessary for orientation and activity in the information space" [3], while A.A. Mukasheva, pointing out the importance of the concept of information competence of students, defines it as "the ability of an individual to use special knowledge and skills in the field of computer and information technologies for solving professional tasks, professional self-development and self-improvement" [4].

Thus, in the scientific and methodological literature, students' information literacy competence is characterized by the ability to learn, recognize, search, and use information in their future professional activities and to work independently with information and communication technologies.

The diversity of information flows and the rapid development of new information technologies create a need for information literacy among professionals. Considering the importance of pedagogical professionals in education and the increasing demands on the quality of professional training of modern pedagogical specialists, we considered it appropriate to take into account the importance of a systemic approach for the development of students' information literacy competence.

Material and research methodology

On the theoretical and methodological basis of the research topic, the problem of systematic approaches development of students' information literacy was examined in the works of domestic and foreign scientists. Guided by the methodology and results of scientific research, general scientific research methods were used to analyze and clarify the scientific literature on the topic.

Findings

The systems approach, which began at the turn of the XIX and XX centuries, is widespread in the methodological directions of modern science. The systematic approach makes it possible to see all elements of the educational process in a system of interconnected components in an interdependent structure and takes into account the definition of the objectives of the functioning of the educational system and its relationship with other systems.

A system (translated from Greek - a whole consisting of parts)- is a totality that can be subdivided into whole, complex, individual subsystems consisting of many interconnected elements [1].

The need to use a common system arises in the study of complex organized integrity, which makes it possible to represent and solve many problems through systematic approaches. The term "system" and the related components of systemic approaches are considered by educational psychologists, biologists, philosophers, sociologists, physicists, mathematicians and economists.

The systems approach- is a branch of the methodology of scientific research based on the consideration of objects as an integral set of elements of relations and connections between a complex object, and the methodology of scientific cognition and social experience based on the consideration of objects as systems [1].

The methodological peculiarity of the systems approach is that it directs research towards uncovering the integrity of the object and the mechanisms that guarantee it, identifying different types of connections of a complex object and focusing on a single theoretical proposition [5].

A number of authors, V. A. Gubanov, V. V. Zakharov, A. N. Kovalenko, have identified the basic principles of a systems approach that summarizes a person's experience with complex systems: the ultimate goal, unity, interconnection, modular structure, hierarchy, functionality, development, the principle of decentralization and uncertainty.

Within the framework of our topic, we decided to focus on the research of foreign and domestic scientists E. G. Judin, E. G. Vinograi, A. G. Kuznetsova, V. Z. Techieva, Sh. T. Taubayeva, T. T. Galiev, G. O. Isakova, who considered the problem of a systematic approach.

In "Philosophy and Methodology of Systems Research", one of the founders of the scientific school, philosopher E. G. Judin, understood the systematic approach as a method of scientific research and experimental development of complex organized objects, considering it primarily not as an analysis of the components of the object, but as its characterization as a kind of integrity, revealing the mechanisms that ensure the integrity of the object [6].

In addition, the author writes in his work that understanding the systems approach as a general scientific methodological direction allows abstracting from the actual content of a concept containing the principles of a systems approach for analytical purposes, thereby revealing the possibility of determining the systemic content of previous scientific concepts and theories when addressing historical and scientific problems.

It should be noted that E. G. Judin considered the systems approach as an integral complex of interconnected elements of scientific cognitive methodology based on the consideration of an object as a system.

Professor E. G. Vinograi, who forms a scientific school in the field of general systems theory and the methodology of the modern systems approach, examines in his works the dialectical concept of the system principle, system patterns and the properties of the integrated system. In his research, the author proposes a number of methodological features of the systems approach [7]:

1. The complexity of the studied objects. The relevance and effectiveness of the system methodology is higher only when the studied objects are the most developed and complex. In complex forms, the influence of systemic patterns is significant;

2. Objects are difficult to structure and informalize. The difficulty in formulating problems is a consequence of their complexity and development, so traditional mathematics cannot solve these problems. In this case, a systematic methodology is needed;

3. Emphasis on synthesis and holistic representation of a complex object. The systematic methodology seeks to generalize and logically integrate the most reasonable methods of any particular scientific research, to identify general patterns of its conduct;

4. Multivariate approaches to problem solving. A consistent approach is designed to identify and analyze many possible solutions to the problem and choose the best alternative. A multivariate analysis of the problem is relevant, since it is impossible to fully and accurately assess the quality of the chosen alternative without taking into account space;

Consequently, in the works of E. G. Vinograi we find a description of the methodological foundations of the system-dialectical approach, the study of integral structures, the categorical

stages and methodological principles of systems research, a modern systems approach and systems analysis, the methods of synthesizing a holistic theoretical picture of a complex object.

Professor A. G. Kuznetsova notes that in his scientific work, the implementation of a systems approach to certain pedagogical objects involves the construction of the logic of certain research steps that allow the object of cognition to be seen and studied as a system. As in general scientific systematics, the pedagogical program of systems research and its methodology are based on the clarification of the essence of the systems approach: as a consideration of an interrelated set of elements acting as a whole in relation to the environment, as a synthesis of all parts of a multisystemic and multifactorial object, and as an analysis of an important, determining, system-forming side of the object [8].

The researcher V. Z. Techieva states that "the systems approach is based on a holistic view of the studied objects, phenomena or processes and is the most universal and appropriate method for analyzing and studying any complex technical, political, economic, social, ecological and other systems. The essence of the systems approach is therefore that every complex object is viewed as a system. This makes it possible to find one's way both in reality and in management practice. A systems representation of reality is a special cognitive technology, a theoretical prerequisite for restructuring the management of the educational process"- she stated [9].

Having considered the issues of the methodological approach, the domestic scientist Sh. T. Taubayeva in her works dwelt extensively on the problem of a systems approach. In the works of the professor, "A systems approach is a set of general scientific methodological positions based on the consideration of objects as systems", "A systems approach is a reflection of dialectical methods in a specific epistemological situation. Therefore, consistency as one of the means of general scientific and methodological research is a scientific approach characterized by originality in the systems study of the educational process and interrelated phenomena" [10].

At the same time, the author writes that the subject under study should be examined based on systematics, which determines the structure of the system and the principles of its management [11].

Professor T.T. Galiev uses the systems approach in the educational process, in the study of the advanced educational system, and proposes to consider the system approach in a targeted direction.

The main task of the systems approach is the methodological orientation of science, which involves implementing the object system. This system is considered a means of achieving set goals and organizing the activities of the subjects of education in the study of the systems approach.

Coherence in education opens up the possibility of significantly increasing the theoretical level of teaching and the level of training in systematic and dialectical thinking [12].

Researcher G. O. Isakova believes that “the creation of a systems approach and the implementation of a system approach requires the development of information about the systems approach, system approach skills, and competencies in cognitive and other activities”. In her scientific work, the author gives the following forecast for the task of developing certain competencies in the field of consistency [13]:

- mastery of the basic principles and concepts of systems approaches;
- acquisition of specific knowledge of systems knowledge and systems theory;
- mastering the methods of implementing a systematic approach (including systematic methods and technologies) in cognitive, scientific, practical, and other activities;
- knowledge, skills, and abilities to understand and form information about the systematic structure of the study of the objects under consideration of the surrounding existence;
- to disseminate the basis of regularity of present and future activities;
- to form knowledge and skills in systematic thinking;

Thus, we see that the problem of coherence in the works of domestic scientists is characterized by the system of the structural model as a set of general scientific methodological positions, as a means of achieving goals, tasks, and results based on the determination of the interrelations of object components, on the formation of future specialists as professionally competent professionals.

Discussion

Thus, we noticed that the ideas of a systems approach involve the constant accounting and use of natural connections inherent in systems in the process of human cognition and practical activity, occupying a leading position in various fields of science.

We see that the application of a systems approach, taking into account the content features, allows us to develop the information competencies of future specialists in the university education system.

Based on the essence, content, and significance of the systems approach in the scientific literature studied above, the development of students' information competence is considered as a comprehensively organized unified system, which considers the following possibilities:

- creation of a model for the development of students' information competence;

- the unity of systemically organized components in the development of professional training of future specialists;
- purposeful consideration of a systematic approach in the educational process within the framework of the research topic;
- development of communication skills and technologies;
- to improve the ability to navigate the information space and information analysis skills.

Conclusion

In conclusion, it should be noted that a systems approach forms the basis of purposeful, structured learning, contributing not only to the acquisition of individual competencies but also to their interrelated development. The implementation of a systems approach requires the efforts of educational institutions, teachers, and students. Therefore, this is an investment in the future, that is, information-competent graduates will become active participants in modern society and successful representatives of the professional environment.

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СТУДЕНТТЕРДІҢ АҚПАРАТТЫҚ ҚҰЗЫРЕТТІЛІГІН ДАМЫТУДАҒЫ ЖҮЙЕЛІЛІК ТҰҒЫРДЫҢ МҮМКІНДІКТЕРІ

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Аңдатпа. Мақалада студенттердің ақпараттық құзыреттілігін дамытудағы жүйелілік тұғырдың рөлі мен мүмкіндіктері қарастырылады. Бүгінгі таңда ақпараттық құзыреттілік цифрлық дәуірдегі негізгі дағдылардың біріне айналып отыр. Ақпаратты тиімді табу, талдау және бағалау мүмкіндігі қазіргі қоғамға бейімделу үшін қажет. Бұл тек техникалық дағдыларды ғана емес, сонымен қатар ақпаратты сенімді дереккөздерден іздеу, сыни тұрғыдан ойлау және ақпаратты этикалық тұрғыдан пайдалану қабілеттерін де қамтиды. Осы орайда студенттердің ақпараттық құзыреттілігін дамыту білім беру мекемелерінің маңызды міндетіне айналуға тиіс. Ақпараттық құзыреттіліктің жоғары деңгейіне ие студенттер оқуда және болашақ кәсіби қызметте де табысты болатыны анық. Демек, студенттердің ақпараттық құзыреттілігін дамыту процесі жүйелі түрде жүзеге асып, әртүрлі білім беру әдістері мен тәсілдерін қамтуы керек.

Зерттеу тақырыбына сәйкес мақалада отандық және шетелдік ғалымдардың ғылыми зерттеулеріне шолу жасалынған. Соның негізінде автор білім алушылардың ақпараттық дағдылары мен сыни ойлауын дамыту контекстінде жүйелілік тұғырдың тиімділігін талдайды. Қазіргі білім беру контекстінде студенттердің ақпараттық құзыреттіліктерін жан-жақты дамытуға ықпал ететін оқытуға интеграцияланған және жүйелі көзқарастың маңыздылығы атап өтіледі. Зерттеу нәтижелері студенттердің ақпараттық құзыреттілігін дамытуды күрделі ұйымдастырылған біртұтас жүйе ретінде қарастыра келе, мүмкіндіктер мен ұсыныстар береді.

Түйін сөздер: құзырет, құзыреттілік, ақпараттық құзыреттілік, жүйе, тұғыр, жүйелілік тұғыр.

ВОЗМОЖНОСТИ СИСТЕМНОГО ПОДХОДА В РАЗВИТИИ ИНФОРМАЦИОННОЙ КОМПЕТЕНТНОСТИ СТУДЕНТОВ

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Аннотация. В статье рассматривается роль и возможности системного подхода в развитии информационной компетентности студентов. Сегодня информационная компетентность становится одним из основных навыков в эпоху цифровых технологий. Способность эффективно находить, анализировать и оценивать информацию необходима для адаптации к современному обществу. Это включает в себя не только технические навыки, но и способность искать информацию в надежных источниках, критически мыслить и использовать информацию с этической точки зрения. В этой связи развитие информационной компетентности студентов становится важной задачей образовательных учреждений. Очевидно, что студенты, обладающие высоким уровнем информационной компетентности, также будут успешными в учебе и будущей

профессиональной деятельности. Следовательно, процесс развития информационной компетентности учащихся должен осуществляться систематически и включать в себя различные образовательные методы и приемы.

В соответствии с темой исследования в статье представлен обзор научных исследований отечественных и зарубежных ученых. На его основе автор анализирует эффективность системного подхода в контексте развития информационных навыков и критического мышления обучающихся. В современном образовательном контексте подчеркивается важность интегрированного и системного подхода к обучению, способствующего всестороннему развитию информационных компетенций студентов. Результаты исследования дают возможности и рекомендации, рассматривая развитие информационной компетентности студентов как комплексно организованную единую систему.

Ключевые слова: компетенция, компетентность, информационная компетентность, система, подход, системный подход.