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METHODOLOGICAL SYSTEM FOR IMPROVING THE SKILLS OF WORKING WITH INFORMATION

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ABSTRACT: This article analyzes the pedagogical methodological system for improving the skills of working with information. The article examines the theoretical foundations, methodological approaches and practical methods for the formation of information competencies in the process of modern education. On the basis of various pedagogical theories, including constructivism, cognitive psychology and digital education models, ways to increase information literacy are highlighted. There are also brief reviews of the research of famous scientists in this area and their application to educational practice.

KEYWORDS: Information competence, methodological system, pedagogy, constructivism, cognitive psychology, digital education, information literacy, educational technology, qualification evolution.

INTRODUCTION: In the conditions of modern Information Society, the ability to effectively work with data is formed as the most basic and necessary skill for each individual. This is due to the fact that today humanity uses a large amount of information in almost all areas of its life. Therefore, it is of particular importance to have skills in processing and using data wisely.

The overabundance and diversity of information further complicates the situation. In these conditions, the importance of extracting the necessary information within the flow of information for students, analyzing it and processing it more usefully increases. Therefore, the skills of working with information are becoming one of the priority areas in the educational system.

Development of information skills in educational processes. Among the leading tasks in education, an important place is occupied by the level of knowledge of students and the development of high-level competencies such as critical thinking, analysis and the development of creative solutions. Training students as professionals who can work with information should be aimed at giving them complex information management skills with the help of modern technologies.

Of particular importance for these purposes are the following:

Critical thinking — Skepticism about the sources of information under study, knowledge of the difference from reliable and unreliable sources, the formation of the ability to come to scientifically based conclusions.

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Analysis — To achieve an understanding of the essence of problems by in-depth research of data, their division into components, comparison, synthesis of results.

Finding creative solutions — To offer new, innovative approaches, to teach how to achieve effective decision-making by applying unconventional methods to solve problems, trying different options.

By developing these skills, young people will be able to extract and correctly use useful things from information flows. As a result, they expand their worldview and reach the upper stages of their personal and professional development.

Future development directions. In connection with the development of the information society, the skill of working with information in the future will again become important.

Technological support for data: the introduction of new tools such as artificial intelligence, machine learning technologies, big data analytics.

Independent use of media resources: promoting the independent use of media materials in Internet resources.

Expanding interactive methods: Extensive use of interactive platforms such as Multimedia textbooks, virtual laboratories, online seminars and webinars.

Thus, the strengthening of the skills of working with information is one of the strategic goals that will bring significant benefits for a person himself and for the whole life of society. In systems that provide high-quality knowledge, the continued development of this direction should remain a constant focus.

From a pedagogical point of view, a methodological system plays an important role in the formation of information competencies. This system includes the following components:

Theoretical foundations-information literacy, cognitive processes, educational psychology.

Methodological approaches-constructivism, design methods, synergistic education.

Applied technologies-digital tools, interactive platforms, data analysis programs.

In the article, we will delve deeper into these components and analyze their importance in the educational process.

1. Theoretical foundations of skills for working with information

1.1. Cognitive psychology and information processing

Cognitive psychology studies the processes by which the human brain receives, stores and processes information. J. Piaget and L. Research by scientists such as Vygotsky shows that knowledge acquisition is achieved through active communication and experience.

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Jean Piaget is the developer of the cognitive development theory of children. In his opinion, an important aspect in education is the assimilation of knowledge in an active form [1].

Lev Vygotsky is the one who introduced the concept of" close Development Zone". He argues that social communication and cooperation play an important role in education [2].

1.2. Methods of activation in constructivism and education

In a constructivist approach, the student builds his knowledge independently.

J. Dewey and J. Educators such as Bruner have made significant contributions to the development of this theory.

John Dewey – who put forward the idea that" education is life itself". In his opinion, education should be associated with practical activities [3].

Jerome Bruner is the author of the proposed methodology of "step – by-step study of concepts in the educational process". In his opinion, the coach should guide the students, but give them the opportunity to think independently [4].

2. Methodological methods for improving information skills

2.1. Digital education technologies

In modern education, the following methods are used:

Blended Learning (mixed learning) is the combination of online and offline teaching methods.

Gamification-increase motivation through gamification.

Development of Big Data and AI – individual training programs.

2.2. Development of critical thinking

Skills such as information assessment, critical analysis of sources, identification of fake news are an important part of modern education.

3. Research by notable scientists and their impact

3.1. Sugata Mitra-the Hole in the Wall experience

As Mitra proves, children can independently gain knowledge through the internet [5].

3.2. Marc Prensky-the concept of Digital Natives

Prensky believes that the modern generation naturally communicates with digital technologies [6].

CONCLUSION

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Pedagogical approaches aimed at the formation of skills for working with information are now increasingly complex processes. Achievements and difficulties in this area are directly related to the availability of a huge amount of information that occurs in a regularly changing environment. Not only is theoretical information sufficient to acquire relevant knowledge for any area of expertise or type of activity, but also the ability to apply it in practice is essential.

Given such cases by educators, it is necessary to apply various strategies and techniques to achieve efficiency at the moment. One of the most effective approaches is to work on the principles of Constructivist education. The main idea of Constructivism is that the student must actively create and apply the knowledge that he is learning independently. This leads to the introduction of various interactive methods with the aim of practicing the practical application of theoretical knowledge.

At the same time, another factor that allows you to deeply understand the sciences in the process of working with information is the principles of cognitive psychology. This field of Science explains to us how the human brain works, where it receives data and how it processes it. For example, aspects such as the structure of memory, the distribution of attention, methods of strengthening information help us determine which methods are effective. With the help of a cognitive approach, students can strengthen their knowledge, improve their logical thinking skills and show initiative in finding solutions to complex issues.

That is why it is important for educators to study this area in depth. Not only are they not limited to simple teaching, but they also introduce strategies that ensure that students are able to control themselves, analyze their problems and find creative solutions.

Ensuring the delivery and reception of information using innovative methods is one of the main features of modern education. In particular, the inclusion of digital technologies in the educational process makes it possible to achieve success. As an example, digital education platforms can be used. On such platforms, students quickly master information in multimedia formats, have the opportunity to test their knowledge, and perform tasks that make the course process more interesting and effective.

New forms of communication have also emerged through tools such as social media, online workshops, video conferences. These methods allow students to create a collaborative environment, work together, and activate information exchange. Such an approach provides an opportunity for students to master knowledge faster and deeper, as well as develop the skills necessary for their further professional activities.

Such an integrated approach not only encourages students to have the ability to successfully assimilate and use information, but also serves to ensure their success in future work activities. Thus, the process of improving the skills of working with information does not only remain a sign that determines the degree of acquisition of theoretical knowledge, but is also a process that can bring its practical results to real life, positively affecting the overall development of students.

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