PEDAGOGICAL OPPORTUNITIES OF USING INFORMATION LITERACY IN THE TEACHING OF INFORMATICS

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Annotation: *The study titled "The Role of Information Literacy in Teaching Informatics and Information Technologies" substantiates the importance of developing information literacy among students and the wider community within the field of information technologies. The article provides an extensive explanation of the concept of information literacy, its significance in integrating into the educational process, and its impact on the teaching of informatics.*

Keywords: *digital literacy, informatics education, students' technological competencies, information culture, fundamentals of cybersecurity, skills for working in a digital environment.*

Introduction. In today's digital society, information technologies and the field of informatics have become an integral part of systems across the globe. Innovative technologies such as computers, internet networks, mobile platforms, and artificial intelligence are widely used in the economy, education, healthcare, culture, and everyday life. As these technologies continue to advance rapidly, the need for strong skills in searching, processing, evaluating, and securely storing information is increasing. For this reason, information literacy—defined as a set of competencies that ensure conscious, responsible, and effective use of information—holds particular importance today.

The process of teaching Informatics and Information Technology aims not only to train students to use technical tools and software products, but also to develop the ability to assess information quality, analyze data, think critically, and apply information safely. The rapid development of digital technologies requires that these skills be mastered at a deeper level, as learners must independently search for information, filter it, and determine its reliability.

Forming students' culture of proper use of internet resources, identifying false or misleading information, and understanding basic cybersecurity principles are essential conditions for functioning effectively in the digital environment. These skills hold a significant place in the content of informatics education and create a solid foundation for students' future academic and professional success.

The importance of information literacy in informatics is explained by its role in directing learners toward conscious interaction with digital technologies and enabling

them to adapt to the modern digital environment. This competence not only influences the quality of education but also contributes directly to the development of the overall digital culture of society. Therefore, promoting information literacy within the study of informatics is one of the key factors supporting students' safe, responsible, and effective digital engagement.

Research Methodology. The research methodology involves the integrated use of various methods aimed at identifying the role of developing information literacy in the teaching process of Informatics and Information Technology. Throughout the study, methods such as surveys, experiments, interviews, statistical analysis, and qualitative analysis are applied to examine students' level of information literacy, learning effectiveness, and the impact of teaching methods used in informatics education. These approaches help develop the skills necessary for students to use information technologies consciously, safely, and effectively.

The concept of information literacy (IL) includes the abilities to search for, process, evaluate, and properly use information. S. S. Akhmetov (2010), in his work "Information Technologies and Information Literacy," highlights the significance of this competency in the educational process, emphasizing that information literacy is connected not only with receiving and applying information but also with ensuring information security. In the digital environment, information literacy plays a crucial role in developing essential skills such as safe internet use, identifying false information, and critically analyzing data.

In the modern education system, the teaching of informatics is undergoing global modernization processes. P. J. Miroshnichenko (2015), in "Informatics Education: Methodological Approaches and Strategies," justifies the importance of applying modern approaches and pedagogical technologies in teaching informatics. The author notes that the use of interactive learning, collaborative activities, and online platforms increases the effectiveness of the learning process and yields significant results in developing students' information literacy.

Pedagogical approaches and interactive teaching methods are considered key factors in enhancing information literacy. A. A. Salikhov (2019), in "Teaching Methodology and Interactive Technologies," states that online lessons, multimedia resources, video materials, practical assignments, and interactive sessions increase student engagement and develop independent thinking and analytical skills in informatics education. According to him, interactive approaches strengthen students' interest in informatics and directly influence the formation of information literacy.

The results obtained during the study clearly demonstrated the importance of information literacy in teaching Informatics and Information Technology, as well as its impact on the learning process. The analyzed data made it possible to draw several critical conclusions that contribute to forming conscious use of information technologies,

improving the teaching process, and enhancing overall educational efficiency.

The educational processes in which interactive methods were applied showed a significant increase in students' mastery of the subject. Through independent inquiry, collaborative work, engagement with online learning platforms, problem-solving tasks, and practical activities, students developed information literacy, analytical thinking, and creative skills. These methods help students reinforce their knowledge and apply it to real-life situations.

The research also confirmed the necessity of specialized training in information security. Students who received instruction in this area demonstrated stronger skills in protecting personal data, acting responsibly online, and identifying cyber threats. Such training prepares them for responsible behavior in digital spaces and enhances their ability to safeguard themselves against harmful software and misinformation.

As students' information literacy indicators increased, a noticeable improvement in learning effectiveness was observed. Learners with stronger information-processing skills achieved higher results in informatics and demonstrated overall academic progress. This confirms that competencies related to the use of information technologies play an important role in improving the quality of education.

Overall, the findings highlight the importance of specialized information-literacy training, interactive methods, and information-security instruction in enhancing the effectiveness of teaching Informatics and Information Technology. Teaching students to use digital technologies correctly, safely, and efficiently has become an essential component of modern education, helping them acquire the competencies needed for successful activity in the contemporary information environment.

The research results clearly demonstrated the central role of information literacy in teaching Informatics and Information Technology and its influence on the learning process. The collected data show that information literacy is particularly important in students' learning activities, especially when applying modern digital technologies in practice. The study also allowed for the formation of important conclusions regarding pedagogical methods, interactive approaches, and the necessity of cybersecurity education that supports effective use of information technologies.

Developing information literacy has a direct impact on improving students' academic performance. Such literacy equips learners not only with the skills to operate digital tools but also with the abilities to analyze, evaluate, and select information. These competencies ensure that students use information technologies consciously in real-life situations and create a foundation for their future professional development.

The study further revealed individual differences in students' use of information technologies. While some students learn technologies quickly and efficiently, others require more time and support. This requires teachers to adopt individualized approaches.

The outcomes of developing information literacy were shown to depend strongly on how learners interact with the digital environment and their level of digital culture.

In addition, the research showed that, along with the advantages of pedagogical methods, certain limitations also exist. Although online learning and interactive methods provide students with significant convenience and opportunities, factors such as technical issues, platform-related constraints, or students' lack of active participation in the online process may negatively affect learning outcomes. Therefore, careful planning and pedagogical caution are necessary when implementing such methods.

Conclusion. The research findings demonstrate that the importance of information literacy in teaching Informatics and Information Technology, as well as its impact on the educational process, has been comprehensively examined. The analysis indicates that information literacy not only enhances students' skills in effectively using digital technologies but also positively influences their overall academic performance. This competency develops learners' abilities to select, analyze, and evaluate information, thereby fostering active critical-thinking processes.

The use of interactive methods and modern technologies increases the effectiveness of the learning process and provides students with broader and more complete opportunities to utilize information technologies. Teaching information security is an essential component of the educational process, as it contributes to protecting personal data and preventing cyber threats. The careful application of pedagogical approaches and methods plays a significant role in improving the quality of learning outcomes.

The factors highlighted in the study serve as both theoretical and practical foundations for developing effective methods, resources, and strategies aimed at enhancing information literacy within informatics education.

REFERENCES

1. To‘raqulovich M. O. Zamonaviy ta’limda axborot texnologiyalari va ularni qo‘llash usul va vositalari //Pedagogik tadqiqotlar jurnali. – 2025. – т. 3. – №. 1. – с. 373-379.

2. Sobitov B. Ta’lim sifatini oshirishda it texnologiyalarining o‘rni va roli //intellectual education technological solutions and innovative digital tools. – 2024. – т. 3. – №. 27. – с. 420-427.

3. Xujayorovich A. I. ET AL. Multimedia texnologiyalarining ta’lim jarayoniga ro‘li va 5-sinf informatika darslarida qo‘llanilishi //лучшие интеллектуальные исследования. – 2025. – т. 47. – №. 2. – с. 436-443.

4. Jo‘rabek N. Boshlang‘ich ta’limda axborot va innavatsion texnalogiyalardan foydalanish //журнал научных исследований и их решений. – 2025. – т. 4. – №. 02. –

c. 524-530.

5. Berdiyevich T. S. ET AL. Inson va kompyuter ozaro ta'sirini fan va talimda qollash //журнал научных исследований и их решений. – 2025. – т. 4. – №. 02. – с. 63-71.

6. Rashidovna M. Z., Kamolovna B. M. Boshlang'ich ta'lim o'qituvchilarining axborot texnologiyalari orqali kasbiy kompetentligini rivojlantirish //pedagogik tadqiqotlar jurnali. – 2025. – т. 2. – №. 2. – с. 473-478.

7. Rashidovna M. Z., Bahrombek o'g'li A. F. Oliy ta 'lim muassasalarida "texnik tizimlarda axborot texnologiyalari" fanining o'qitish metodikasini kompetentsiyaviy yondashuv asosida takomillashtirish //Pedagogik tadqiqotlar jurnali. – 2025. – т. 2. – №. 2. – с. 441-445.

8. Kodirov A. S., Nomozova M. T. L. Q. Masofaviy talimda raqamli texnologiyalarining istiqbolli asoslari //academic research in educational sciences. – 2023. – т. 4. – №. CSPU conference 1. – с. 753-756.