

THEORETICAL ASPECTS IN THE FORMATION OF PEDAGOGICAL SCIENCES



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DIGITAL ECONOMY AND INFORMATION TECHNOLOGIES IN SOCIAL LIFE.

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In the era of globalization, the digital economy and information technologies have become the foundation of modern social development. They are not only tools for improving productivity but also powerful drivers of innovation, communication, and cultural transformation.

The role of digital economy in society.

The digital economy refers to economic activities based on digital technologies, digital services, and online platforms. It provides new opportunities for business growth, stimulates entrepreneurship, and creates new markets. E-commerce, online banking, fintech, and digital trade are reshaping traditional economic systems and introducing new business models. The development of digital infrastructure contributes to economic sustainability and global competitiveness.

Transformation through information technologies.

Information technologies influence almost every aspect of human life. Artificial intelligence and big data allow governments, companies, and individuals to make more informed decisions. The Internet of Things connects devices and services, creating "smart homes" and "smart cities." Cloud computing offers flexible storage and computing power, enabling digital solutions to be accessible to both businesses and individuals.

Impact on key social spheres.

Education. The integration of digital technologies into education has fundamentally transformed the learning process. Online platforms, virtual classrooms, and digital libraries provide learners with unlimited access to knowledge and resources. Distance learning enables students to pursue education regardless of their location, social status, or physical limitations, thereby promoting inclusiveness and equality. Furthermore, the use of artificial intelligence in education supports personalized learning pathways, adaptive testing, and real-time feedback. Digital tools also encourage interactive learning, enhance collaboration among students and teachers, and promote the development of 21st-century skills such as critical thinking, creativity, and digital literacy.



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Healthcare. Digital technologies are revolutionizing healthcare systems worldwide. Telemedicine allows patients to consult with doctors remotely, reducing the need for physical visits and increasing access to healthcare, especially in rural or underserved areas. Mobile health applications empower individuals to monitor their health indicators, track fitness, and receive timely medical advice. Artificial intelligence is increasingly being used for early diagnosis, treatment planning, and medical imaging analysis, which improves accuracy and efficiency in clinical practice. Moreover, robotic surgery and digital hospital management systems enhance the overall quality and accessibility of healthcare services. These innovations not only reduce costs but also save lives by providing faster and more precise medical solutions.

Public Administration. The adoption of digital technologies in governance has led to the development of e-government systems that simplify interactions between citizens and state institutions. Online services reduce bureaucracy by offering digital platforms for tax payments, registration processes, and public service delivery. This increases efficiency, saves time, and minimizes corruption risks by ensuring transparency. Digital technologies also strengthen trust between governments and citizens, as information becomes more accessible and decision-making processes more open. Furthermore, the introduction of big data analytics enables governments to design policies based on evidence and real-time data, thereby improving public administration and sustainable development.

Social Communication. In the digital era, communication has become faster, more interactive, and more globalized. Social media platforms, messaging applications, and online communities connect people across cultures and borders, fostering intercultural dialogue and social integration. These technologies have reshaped cultural identity by creating new forms of self-expression and social participation. At the same time, digital communication tools play a significant role in political life by enabling civic engagement, online activism, and the dissemination of information. However, while social media empowers democratic participation, it also presents challenges such as misinformation, cyberbullying, and the risk of social polarization. Therefore, responsible use of digital communication is essential for building a healthy and inclusive digital society.

Challenges and risks. Despite their benefits, digital economy and information technologies also bring serious challenges. Digital inequality prevents equal access to technology, while cybersecurity threats endanger data



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security and personal privacy. Moreover, the rapid spread of digital platforms raises ethical questions about the use of artificial intelligence, personal data, and human rights in the digital space.

Conclusion. The digital economy and information technologies are shaping the future of society by redefining economic relations, education, healthcare, governance, and social interaction. For their effective and responsible implementation, governments must adopt appropriate policies, businesses must invest in innovation, and educational systems must prepare qualified professionals. Ultimately, the integration of digital technologies into social life is a key factor in achieving sustainable development and improving the quality of life.

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