



HISTORICAL DEVELOPMENT OF INFORMATION CULTURE IN THE EDUCATIONAL PROCESS AND ITS CONTEMPORARY PEDAGOGICAL SIGNIFICANCE

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Abstract

This article examines the historical development of information culture and its contemporary pedagogical significance within the educational process. The study analyzes the main stages of information culture formation in connection with major information revolutions, from the emergence of writing and printing to the development of modern digital technologies. Special attention is given to the role of information and communication technologies in shaping learners' information culture, media literacy, and critical thinking skills. The paper highlights the pedagogical importance of information culture in developing students' intellectual potential, independent learning abilities, and responsible use of information in the digital environment. The findings emphasize that integrating historical experience with modern pedagogical approaches contributes to the effective formation of information culture and supports the development of an informed, competent, and socially responsible generation in the context of an information-oriented society.

Keywords: Information culture, educational process, information society, media literacy, digital technologies, pedagogical significance, critical thinking.



Introduction

In the era of globalization and rapid digital transformation, information has become one of the most valuable resources shaping social, economic, and educational development. The expansion of information exchange, the widespread use of information and communication technologies, and the integration of digital platforms into everyday life have fundamentally transformed the way knowledge is produced, distributed, and consumed. Under these conditions, the formation of information culture has emerged as a key pedagogical challenge, particularly within the educational process.

Information culture reflects an individual's ability to search for, analyze, evaluate, and use information effectively and responsibly. In education, it is closely connected with the development of critical thinking, media literacy, and independent learning skills. Understanding the historical development of information culture provides important insights into how societies have responded to changes in information transmission—from oral traditions and written texts to print media and modern digital technologies.

The educational system plays a central role in shaping information culture, as it prepares learners to navigate complex information environments and to adapt to the demands of an information-oriented society. Therefore, examining the historical evolution of information culture and its contemporary pedagogical significance is essential for designing effective educational strategies that foster informed, competent, and socially responsible learners.

Literature Review

The concept of information culture has been widely explored in interdisciplinary research encompassing pedagogy, sociology, communication studies, and information science. Scholars emphasize that information culture is a key component of the information society and reflects individuals' ability to interact critically and responsibly with information in various social contexts. Early theoretical foundations of the information society were developed by researchers such as D. Bell, M. McLuhan, O. Toffler, and M. Castells, who analyzed the transformative role of information and communication technologies in shaping modern social structures.



D. Bell introduced the notion of the post-industrial society, highlighting the central role of knowledge and information in economic and social development. M. McLuhan focused on the influence of media on human perception and cognition, arguing that media technologies shape patterns of thinking and social interaction. O. Toffler's concept of the "third wave" emphasized the transition to an information-based civilization, while M. Castells examined the networked nature of contemporary society and the impact of digital communication on social relations.

Pedagogical studies on information culture stress the importance of education in developing information literacy, media competence, and critical thinking skills. Researchers argue that traditional educational models are insufficient for addressing the challenges of the digital age and advocate for learner-centered and technology-enhanced approaches. Information culture in education is increasingly associated with the ability to evaluate information sources, resist misinformation, and use digital tools ethically and effectively.

National studies, particularly those conducted by Uzbek scholars, focus on the development of information culture within the context of educational reform, digitalization, and media policy. These studies examine the role of mass media, internet technologies, and educational institutions in shaping learners' information behavior and media awareness. Historical and cultural sources, including classical texts and early print media, are also analyzed to demonstrate the long-standing significance of truthful and responsible information in social development.

Overall, the reviewed literature indicates that information culture is a complex and dynamic phenomenon that requires an integrated pedagogical approach. Despite extensive research, there remains a need for systematic studies that combine historical analysis with modern educational perspectives to better understand the pedagogical significance of information culture in contemporary education.

Research Methodology

This study is based on a comprehensive and interdisciplinary methodological approach aimed at examining the historical development of information culture and its contemporary pedagogical significance. The research integrates theoretical, historical, and pedagogical perspectives to ensure a holistic analysis of the subject. The study employs a qualitative research design, relying on the analysis of



scholarly literature, historical sources, and normative documents related to information culture, media development, and educational policy. Historical-comparative analysis is used to identify key stages in the evolution of information culture, including major information revolutions and their influence on educational practices.

Theoretical analysis is applied to examine fundamental concepts of the information society, media culture, and information literacy, drawing on the works of leading scholars in these fields. Content analysis is conducted to explore the role of traditional and digital media in shaping information culture within the educational process. In addition, pedagogical analysis is used to assess how information culture is integrated into curricula, teaching methods, and learning environments.

The combination of these methods ensures the scientific validity and reliability of the research findings and allows for a systematic interpretation of the role of information culture in modern education.

Analysis and Results

The analysis demonstrates that the development of information culture is a complex, multi-stage process closely linked to historical transformations in information transmission and communication technologies. Each major information revolution—from the emergence of writing and printing to the spread of digital and network technologies—has significantly influenced educational practices and the ways knowledge is created, stored, and disseminated. These transformations have progressively reshaped learners' interaction with information and expanded the pedagogical responsibilities of educational institutions.

The results of the historical analysis indicate that early forms of information culture were primarily based on oral and written traditions, emphasizing the preservation and transmission of knowledge. The invention of printing marked a turning point by democratizing access to information, increasing literacy, and supporting the development of formal education systems. Subsequent technological innovations, such as radio, television, and later computers, further accelerated information exchange and introduced new forms of educational content and communication.

The findings also reveal that in the contemporary digital environment, information culture has acquired new qualitative characteristics. The widespread use of the internet, social media, and digital platforms has increased both the volume and



speed of information flow, creating new opportunities as well as challenges for education. While learners now have unprecedented access to information, they also face risks related to misinformation, information overload, and unethical use of digital resources. This situation highlights the growing importance of pedagogical strategies aimed at developing critical thinking, media literacy, and responsible information behavior.

The analysis of current educational practices shows that integrating information culture into the teaching and learning process contributes positively to students' cognitive development and independent learning skills. Educational environments that actively employ digital tools and learner-centered approaches are more effective in fostering information culture competencies. At the same time, the results indicate that the successful formation of information culture depends not only on technological availability but also on pedagogical guidance, curriculum design, and teachers' professional competence.

Overall, the results confirm that information culture plays a crucial role in modern education and serves as a key factor in preparing learners for active participation in an information-oriented society. The combination of historical experience with contemporary pedagogical approaches enables a more comprehensive understanding of information culture and supports its effective development within the educational process.

Conclusion/Recommendations

The study confirms that information culture is a fundamental component of modern education and a key factor in the intellectual, social, and ethical development of learners. Its historical evolution demonstrates that changes in information transmission and communication technologies have continuously reshaped educational practices and learning environments. In the contemporary digital era, information culture extends beyond technical skills and encompasses critical thinking, media literacy, and responsible information behavior.

The findings indicate that the effective formation of information culture within the educational process requires the integration of historical experience with modern pedagogical approaches. Educational institutions play a decisive role in preparing learners to navigate complex information environments, evaluate information sources critically, and use digital technologies ethically and purposefully. The study



also highlights that technology alone is insufficient; pedagogical guidance, curriculum design, and teacher competence are essential for fostering a sustainable information culture.

Based on the results of the research, the following recommendations are proposed:

- incorporate information culture and media literacy components into educational curricula at all levels;
- promote learner-centered and interactive teaching methods that support critical thinking and independent learning;
- enhance teachers' digital and pedagogical competencies through continuous professional development;
- encourage the responsible and ethical use of digital technologies while ensuring information security;
- utilize historical and cultural heritage as a foundation for developing values-based approaches to information use.

Implementing these recommendations will contribute to the development of an informed, competent, and socially responsible generation capable of meeting the challenges of an information-oriented society.

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