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THE EVOLUTION OF ARTIFICIAL INTELLIGENCE IN FOREIGN LANGUAGE TEACHING

The article explores the historical development of artificial intelligence and its application in the educational field, with particular emphasis on foreign language teaching. The main stages of AI integration into education are analyzed, from early computer-assisted language learning to modern intelligent language learning systems. The study highlights the impact of artificial intelligence on teaching methodologies, assessment practices, and personalized language learning. Special attention is given to the role of AI technologies in higher education and digital language instruction.

Key words: *artificial intelligence, education, foreign language teaching, educational technologies, computer-assisted language learning, personalized learning.*

У статті досліджено історичний розвиток штучного інтелекту та його застосування в освітній сфері з особливим акцентом на викладання іноземних мов. Проаналізовано основні етапи інтеграції штучного інтелекту в освіту – від ранніх форм комп'ютерно-асистованого навчання мов до сучасних інтелектуальних систем вивчення мов. У дослідженні висвітлено вплив штучного інтелекту на методики навчання, практики оцінювання та персоналізоване мовне навчання. Особливу увагу приділено ролі технологій штучного інтелекту у вищій освіті та цифровому мовному навчанні.

Ключові слова: *штучний інтелект, освіта, викладання іноземних мов, освітні технології, комп'ютерно-асистоване навчання мов, персоналізоване навчання.*

We would like to start by paying attention to the rapid development of artificial intelligence (AI) that has significantly influenced various spheres of human activity, including industry, healthcare, communication, and especially education. Over the past decades, AI technologies have reshaped the ways knowledge is created, delivered, and assessed, introducing new tools that support both teachers and learners. Nevertheless, the integration of artificial intelligence into the educational field did not occur suddenly or spontaneously, nor was it the result of a single technological breakthrough. Instead, the use of AI in education emerged through a long and complex historical process that began in the mid-twentieth century with the appearance of early computers and the first attempts at automated instruction. Initial applications were limited in scope and functionality, focusing mainly on programmed learning and basic data processing. Despite these limitations, early experiments laid the conceptual and technological foundations for future developments.

It is essential to point out that this evolutionary process has continued into the present day, driven by advances in computing power, data analysis, and machine learning. The rapid development of artificial intelligence (AI) has significantly influenced various spheres of human activity, including education and language learning. Over recent decades, AI technologies have transformed traditional approaches to teaching and learning by introducing digital tools that

enhance interaction, personalization, and efficiency. However, the integration of artificial intelligence into the educational field, particularly into foreign language teaching, was not immediate. It was the result of a long historical process that began in the mid-twentieth century and continues to evolve today.

The earliest applications of artificial intelligence in education can be traced back to the 1950s and 1960s, when computer-assisted instruction first appeared. In foreign language teaching, these early systems were based on programmed learning and behaviorist theories. Language drills, vocabulary repetition, and grammar exercises were presented in linear formats, allowing learners to practice basic skills. Although these systems lacked adaptability and communicative elements, they marked the beginning of computer-assisted language learning (CALL).

During the 1970s and 1980s, the development of expert systems and early intelligent tutoring systems expanded the use of AI in education. In language teaching, these systems attempted to analyze learners' errors and provide corrective feedback. Rule-based models were used to explain grammatical structures and guide students through exercises. This period represented a shift from purely mechanical repetition to more cognitively oriented approaches in foreign language learning.

The 1990s brought significant changes with the spread of personal computers and the Internet. Multimedia technologies enabled the integration of audio, video, and interactive tasks into language learning environments. Although artificial intelligence components were still limited, learning management systems and digital dictionaries became common tools in language education. Automated testing and electronic feedback began to support teachers in assessment and course management.

In the early twenty-first century, advances in machine learning, natural language processing, and data analytics significantly enhanced the role of AI in foreign language teaching. Adaptive learning platforms were developed to adjust content according to learners' proficiency levels, learning pace, and individual needs. Speech recognition technologies allowed learners to practice pronunciation, while intelligent systems provided instant feedback on grammar and vocabulary usage.

Nowadays, artificial intelligence plays a crucial role in foreign language education at all levels. AI-powered chatbots, virtual tutors, automated writing evaluation tools, and personalized learning applications are widely used in both classroom and online instruction. These technologies support communicative competence, learner autonomy, and continuous assessment. At the same time, they enable teachers to focus on creative, interactive, and intercultural aspects of language learning.

Despite the numerous advantages of artificial intelligence in foreign language education, certain challenges remain. Ethical issues related to data privacy, academic integrity, and the balance between technology and human interaction continue to be discussed. Nevertheless, the historical development of AI in language teaching demonstrates its strong potential to improve learning outcomes and modernize educational practices.

In conclusion, the history of artificial intelligence in the educational field, and particularly in the context of foreign language teaching, demonstrates a long and gradual process of technological and pedagogical transformation. Initially, AI applications were limited to simple computer-based drills and programmed instruction, which primarily focused on repetitive exercises such as vocabulary memorization, grammar practice, and basic comprehension tasks. While these early tools provided a foundation for computer-assisted language learning, they were rigid, linear, and offered minimal adaptation to individual learners' needs. We have to mention the fact that language education evolved from a one-size-fits-all model into a learner-centered approach, where AI technologies support differentiated instruction and facilitate continuous assessment. Modern AI tools, such as virtual tutors, speech recognition software, automated writing evaluation, and interactive chatbots, have further enriched the learning experience by providing immediate, context-sensitive feedback, simulating real-life communication, and enhancing student engagement. Moreover, AI's integration into foreign language education has encouraged a more

flexible and dynamic approach to teaching. Educators can now focus on developing higher-order skills, such as critical thinking, cultural competence, and communicative abilities, while AI handles routine tasks like grading, error correction, and tracking learner progress. This combination of human guidance and intelligent technological support has fundamentally reshaped the educational process, creating a more efficient, interactive, and personalized learning environment. Looking ahead, it is essential to point out that the continued evolution of artificial intelligence is likely to have an even greater impact on language education. Emerging technologies, such as conversational AI, immersive virtual environments, and predictive analytics, promise to further enhance the ability to tailor instruction to individual learners and provide richer, more authentic language experiences. Thus, the historical development of AI in education illustrates not only a shift from simple drills to advanced systems but also a broader transformation in the philosophy and practice of language teaching, ensuring that education becomes increasingly learner-centered, adaptive, and responsive to the needs of the twenty-first century.

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МОЖЛИВОСТІ АРТТЕРАПІЇ У ВИРІШЕННІ ПРОБЛЕМ ЕМОЦІЙНОГО БЛАГОПОЛУЧЧЯ УЧНІВ У ПРОЦЕСІ ТЕХНОЛОГІЧНОЇ ОСВІТИ

Стаття присвячена теоретичному обґрунтуванню та аналізу педагогічного досвіду застосування елементів арттерапії на уроках технологій як інструменту підтримки емоційного благополуччя учнів в умовах воєнного часу. На основі проведеного опитування виявлено, що більшість учителів технологій систематично використовують творчі практичні види діяльності, які мають арттерапевтичний потенціал, і фіксують їх значний позитивний вплив на психоемоційний стан школярів.

Ключові слова: арттерапія, емоційне благополуччя учнів, технологічна освіта, уроки технологій, творча практична діяльність, психоемоційний стан.

The article is devoted to the theoretical substantiation and analysis of pedagogical experience of applying art therapy elements in technology lessons as a tool for supporting the emotional well-being of students in wartime conditions. Based on the conducted survey, it was found that the majority of technology teachers systematically use creative practical activities that have art therapy potential, and record their significant positive impact on the psycho-emotional state of schoolchildren.

Keywords: art therapy, emotional well-being of students, technological education, lessons of technology, creative practical activity, psycho-emotional state.