

THE SIGNIFICANCE OF USING ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN TEACHING FOLKLORE WORKS IN HIGHER EDUCATION INSTITUTIONS

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Annotation: *This article analyzes the significance of using artificial intelligence (AI) technologies in the process of teaching folklore works in higher education institutions. It explores the possibilities of individualizing the learning process, organizing students' activities in an interactive format, and studying national cultural heritage within the digital environment through AI tools. The paper demonstrates the effectiveness of applying artificial intelligence, voice narration, text analysis, and visualization systems in teaching Uzbek oral folk art. Furthermore, it presents a scientific discussion on how AI technologies can be utilized to analyze folklore materials, identify character systems, and foster students' creative thinking.*

Keywords: *artificial intelligence, digital pedagogy, teaching folklore works, innovative educational technologies, STEAM approach, interactive learning, digital humanities, Uzbek oral folk heritage.*

The education system of the 21st century is developing in close connection with digital technologies. On a global scale, the modernization of education has entered a new phase with the integration of artificial intelligence (AI) technologies. In this regard, integrating AI elements into the process of teaching folklore—works of oral tradition—does not only serve to make the learning process more innovative but also creates new opportunities for developing students' national identity, creative thinking, and cultural awareness.

As the President of the Republic of Uzbekistan, Sh. M. Mirziyoyev, emphasized: “The introduction of advanced information technologies into the educational process and the development of modern digital skills among teachers are among the most important tasks of today.” (Mirziyoyev, 2022). This statement is fully applicable to the field of teaching national folklore as well.”²¹. This initiative is equally relevant to the system of teaching oral folk art.

The use of artificial intelligence in teaching folklore represents a new academic direction that integrates the humanities with digital technologies. It is being formed

²¹ Mirziyoyev Sh. M. *Yangi O'zbekiston strategiyasi*. –Toshkent: “O'zbekiston” nashriyoti. 2022.

within the framework of the “Digital Humanities” concept (Anderson, 2021), which implies the analysis, interpretation, and preservation of humanity’s cultural heritage through artificial intelligence.

By its very nature, folklore is a reflection of a people’s consciousness, worldview, values, and historical memory. However, in traditional forms of education, the study of this rich cultural heritage often relies on passive learning activities. Students may read and analyze texts, but their opportunities for creative reinterpretation, digital modeling, or interactive learning remain limited.

Artificial intelligence technologies remove these constraints and elevate the teaching of folklore to a new level. In the educational process, generative language models such as ChatGPT, Claude, and Gemini, as well as speech synthesis and visualization systems, create an innovative learning environment for both teachers and students. As Professor J. H. Miller (2023) emphasizes, “Artificial intelligence should not be viewed merely as a tool for automation, but rather as a cognitive partner that expands human thought.”

Would you like me to continue translating the next section (about methodological foundations and AI applications in folklore education) into English as well, keeping the same academic tone and reference styl²². In this context, AI technologies deepen students’ cognitive processes in analyzing folklore works and enable multilayered interpretation of their essence.

In higher education, the application of AI technologies in teaching folklore can be implemented in the following directions:

1. Automated Text Analysis

AI-based text analysis systems (such as ChatGPT or IBM Watson NLP) make it possible to automatically identify motifs, character systems, main ideas, and stylistic features in folklore works.

For example, when analyzing the epic “Alpomish,” an AI program can detect recurring motifs such as “loyalty,” “patriotism,” and “bravery,” and present their frequency as statistical indicators.

2. Interactive Chatbots

Through AI-based “virtual characters,” students can engage in live dialogue with folklore figures. Chatbots like “A Conversation with Alpomish” or “Go‘ro‘g‘li Answers” immerse learners in an interactive learning process.

This approach is grounded in constructivist learning theory, which posits that knowledge is actively constructed by the learner.

3. Text-to-Speech Storytelling

²² Miller J. H. Cognitive Expansion through Artificial Intelligence in Education. Cambridge University Press 2023.

Transforming Uzbek folk tales into audio format using AI speech synthesis not only makes the learning process more engaging but also enhances emotional perception, expressiveness, and oral communication skills.

4. Visualization and Mapping

AI tools can visually represent place names, narrative developments, and character relationships within folklore texts.

For instance, mapping the adventures in the epic “Go‘ro‘g‘li” allows students to better understand the geographical scope of the narrative.

5. Creative Writing and Plot Generation

With generative AI tools, students can create new tales and narratives inspired by folk traditions. This practice strengthens their creative thinking, compositional skills, and sense of cultural continuity.

The use of artificial intelligence technologies aligns with the principles of STEAM education (Science, Technology, Engineering, Art, and Mathematics). In the context of teaching folklore, this approach manifests as follows:

Science – organizing the analysis of folklore on a scientific basis.

Technology – integrating digital tools into the learning process;

Art – promoting folk creativity and aesthetic values;

Engineering – modeling analytical algorithms;

Mathematics – applying statistical models in text analysis.

From a psychological perspective, AI-assisted learning enhances students’ motivation, self-expression, creativity, and independent learning skills.

As educator A. A. Verbitskiy notes, “The learning process in an interactive environment shapes the student’s active position in acquiring knowledge and increases their cognitive independence.”

In recent years, digital education projects have been actively implemented in higher education institutions across Uzbekistan. At the faculties of philology of Tashkent State Pedagogical University, Samarkand State University, and Bukhara State University, pilot classes on folklore analysis using ChatGPT have been conducted.

The results of these experiments showed that:

Students’ analytical thinking regarding folklore works increased by 32%;

Their ability to express personal viewpoints in creative writing assignments improved by 27%;

The index of interest in the learning process rose by 40%.

These indicators confirm that artificial intelligence technologies are an effective factor in enhancing educational efficiency.

The role of AI technologies in higher education continues to grow annually.
The use of AI in teaching folklore:

makes education more learner-centered;
integrates national culture with modern technologies;
transforms the learning process into an interactive and creative experience.

As a result, oral folk literature is revitalized not only as a historical heritage but also as part of the digital humanities. This, in turn, requires the modern educator to possess innovative thinking, technological literacy, and cultural responsibility.

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