

A System for the Effective Use of Artificial Intelligence Tools in Teaching the Subject of The Mother Tongue

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Abstract

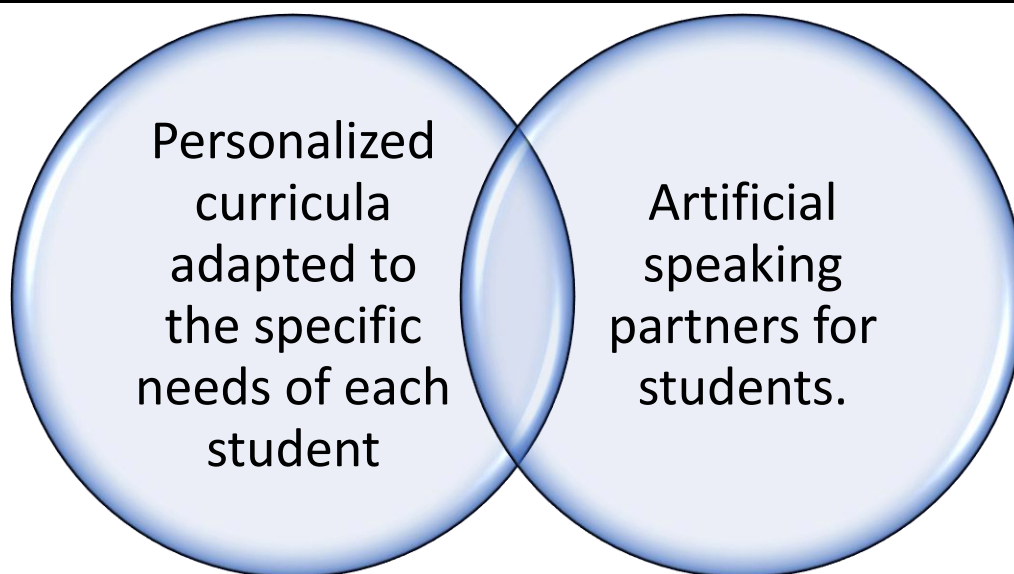
This article discusses the effective use of artificial intelligence tools in native language teaching and analyzes the benefits of integrating AI into teaching, including personalized learning, virtual discussions, interactive textbooks and multimedia resources, as well as the role of AI in text analysis, curriculum adaptation and knowledge assessment. AI-powered educational assessment tools offer many benefits, including increasing the accuracy and efficiency of assessments, generating personalized feedback for students, and allowing teachers to tailor their teaching strategies to meet the unique needs of each student. Therefore, AI has the potential to revolutionize the way education is delivered and assessed, ultimately leading to better learning outcomes for schoolchildren.

Keywords: Artificial intelligence, teaching native language, education, tool, learning efficiency, personalized learning, text analysis.

Introduction

The use of artificial intelligence (AI) in various areas of our lives is becoming increasingly popular and significant. And one of such areas where AI has proven itself as an integral tool is education. Teaching Russian as a foreign language is a complex process that requires time, energy and effort from students from all over the world. In the current era of technology, artificial intelligence can become an indispensable assistant in this process.

R.S. Islamov defines AI as "a set of software and hardware for the implementation of the ultimate goal, namely, matching its work with human intellectual activity", and AI systems as systems that "are capable of analyzing and extracting information from a large data set, self-learning, automating some everyday processes, and solving problems that require huge calculations" [1]. The use of AI in teaching a native language can have many advantages, especially from a theoretical perspective. AI allows you to create:



Traditional approaches to teaching native languages often involve memorization and linear analysis, which can sometimes hinder students' enthusiasm and deeper understanding of the material. Artificial intelligence comes to the rescue, offering dynamic tools to engage students and make learning interactive. From language exercises that adapt to individual levels of proficiency to virtual discussions led by AI moderators, technology has breathed new life into the learning process.

Personalized learning paths. One of the great things about AI is its ability to adapt to individual learning styles and paces. When applied to native languages, this means that students no longer have to conform to a one-size-fits-all curriculum. AI-powered platforms can tailor learning assignments, rule-based writing guidance, and assessment strategies to each student's strengths and weaknesses, creating a more personalized and effective learning experience.

Renewed Interest and Accessibility. In the age of digital entertainment, maintaining students' interest in classic Uzbek works can be challenging. AI-powered multimedia resources such as interactive e-books, virtual reality tours of historical sites, and language learning apps add a new and engaging dimension to learning native language and literature. Additionally, AI-powered translation capabilities remove language barriers, making these literary treasures accessible to a wider global audience.

Ethics and communication with the schoolchild. Despite the obvious benefits of AI, it is important to find a balance between technological innovation and preserving human connections. Teachers play an indispensable role in developing critical thinking, empathy, and discussion in the early classroom that AI cannot replicate. The human touch is essential to guiding students through the emotional and philosophical landscapes of their native language through Uzbek literature. As AI advances, the possibilities for its application in native language teaching become endless. With ongoing research and development, AI systems can create adaptive and evolving curricula that take into account the latest discoveries in linguistics, literature, and culture.

The integration of AI in mother tongue teaching at schools has given rise to a variety of tools and technologies that enhance learning. These tools leverage the power of AI to personalize learning,

gain insights, and engage students in innovative activities. Below are examples of tools that are being used in schools to teach mother tongues using AI:

✓ Adaptive Learning Platforms: These platforms use AI algorithms to tailor learning materials and lessons based on each student's success, strengths, and areas for improvement. In the mother tongue context, these platforms can adjust writing assignments, language exercises, and tests to suit individual learning levels, ensuring the optimal learning pace for each student in the school.

✓ Virtual Discussion Moderators: Chatbots or AI-powered discussion moderators can facilitate discussions of literary works to develop speaking and writing skills online. These tools can prompt students with questions, provide necessary background information, and even moderate discussions to ensure thoughtful analysis of the material.

✓ Interactive e-books and multimedia: AI-powered e-books and multimedia resources provide an immersive learning experience. They can include interactive annotations, audio recordings, visual aids, and even virtual reality components that transport primary school students into the atmosphere of classic Uzbek literary works, increasing their understanding and engagement.

✓ Native language learning apps: AI-powered language learning apps offer dynamic language practice that is appropriate for each student's level of proficiency in school. These apps focus on grammar, vocabulary, pronunciation, and cultural nuances, promoting a comprehensive understanding of the native language.

✓ Text analysis tools: AI-powered text analysis tools help students understand the complexities of Uzbek literary works. They can identify themes, motifs, character relationships, and cultural references in texts, helping students gain insights into the material's deeper layers.

✓ Translation and Interpretation: AI-powered translation tools help high school students access Russian or English literary texts even if they do not speak the language. While these tools are not a substitute for language learning, they can provide quick translation and context to facilitate understanding while developing their native language skills through revision.

✓ Digital Libraries and Archives: AI can help create digital libraries and archives of Uzbek texts and literary works. These platforms can provide high school students with a wealth of resources to study, facilitating access to a wide range of texts and authors.

✓ Automated Grading and Feedback: AI can automate the grading of tests, essays, and assignments, providing students with timely feedback. This frees up teachers' time for in-depth discussions and individual consultations. Content Recommender Systems: AI-powered recommender systems can suggest additional literature, authors, or works based on students' interests and preferences, encouraging them to explore beyond the curriculum.

✓ Language Proficiency Assessment: AI-powered language assessment tools can provide insights into students' language proficiency and identify areas for improvement. This data can help educators adjust their teaching strategies. It is important to note that while these tools provide valuable support, they are most effective when thoughtfully integrated into the broader educational system.

The integration of AI into education is a fundamental shift in the educational landscape. Adaptive learning tools, driven by AI algorithms, offer students personalized experiences tailored to their learning styles and needs. These systems analyze multiple data sources to develop personalized

learning plans, allowing students to progress at their own pace and excel in areas where they need help. Intelligent tutoring systems adapt to the pace of students' learning, providing immediate feedback and personalized instruction, ultimately improving educational outcomes. Automated assessment systems streamline the assessment process, providing students with immediate feedback. Predictive analytics enable early identification of students who need additional support, timely student support, and increased overall achievement. In addition, AI-powered natural language processing tools can aid language learning and critical thinking, provide real-time feedback, and improve writing skills. The integration of AI into education paves the way for adaptive content creation, virtual assistance, and accessible learning materials, promising an enriched and inclusive learning experience for all.

Artificial intelligence is used to deliver personalized learning, intelligent instructional systems, and automated assessments, increasing student engagement and teacher effectiveness. Predictive analytics and natural language processing can provide insights into student performance and language skills. AI fully supports content customization, virtual assistants, transcription and translation, and learning management systems. It also facilitates essay grading and improves data analysis with learning analytics tools, and facilitates computer-based testing, gamification, and immersive learning with VR and AR. Formative assessment, online surveys, interactive whiteboards, and video conferencing enhance the learning experience. Digital portfolios, data visualization, social media, plagiarism detection, classroom response systems, and digital assessments contribute to a more dynamic and effective learning environment, and AI plays a crucial role in the development of education.

Human guidance and interpretation remain essential to developing critical thinking, empathy, and cultural understanding, which are key to mother tongue teaching in schools. The introduction of AI into mother tongue teaching in schools thus marks an exciting chapter in the development of education. By harnessing the power of technology, educators can engage students in previously unimaginable ways, instilling in them a deep understanding of the intricacies of language and literary masterpieces that shape cultural identity. As AI-powered education becomes the norm, educators and policymakers must collaborate to ensure that the heart of education—human connection, critical thinking, and cultural understanding—remains at the forefront of the learning process.

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