

## THE ROLE OF ARTIFICIAL INTELLIGENCE IN LANGUAGE LEARNING: A COMPARATIVE ANALYSIS OF ENGLISH AND UZBEK

Toshtanbekov Ixlosbek Suyunali o'g'li

Xoltoev Aziz Qahramon o'g'li

Uzbekistan State University of World Languages

English philology students

ixlost04@gmail.com

Azizxoltoev1@gmail.com

Scientific advisor: Meyliyev Muzaffar

**Abstract.** The field of language education has significantly evolved due to the rapid development of artificial intelligence technologies. This study examines the role of AI tools in language learning, with a particular focus on English and Uzbek. Emphasis is placed on learning efficiency, personalization, and accessibility. Using a descriptive and comparative methodology, the research analyzes how AI-powered applications, language learning platforms, and intelligent tutoring systems contribute to overcoming learning challenges.

**Background.** In recent years, artificial intelligence has become an integral part of educational technologies worldwide. Its application in language learning has attracted increasing attention from researchers and educators due to its ability to provide adaptive and interactive learning environments. However, the implementation of AI in less-resourced languages such as Uzbek remains limited and requires further investigation.

**Key words:** artificial intelligence, language learning, digital tools, personalized learning, English-Uzbek education.

**Аннотация.** Сфера языкового образования значительно изменилась в результате стремительного развития технологий искусственного интеллекта. Данное исследование рассматривает роль ИИ-инструментов в изучении языков, с особым акцентом на английский и узбекский языки. Особое внимание уделяется эффективности обучения, персонализации и доступности. В исследовании используется описательная и сравнительная методология для анализа того, как приложения на базе ИИ, образовательные платформы и интеллектуальные системы обучения помогают преодолевать трудности обучения.

**Ключевые слова:** искусственный интеллект, изучение языков, цифровые инструменты, персонализированное обучение, английско-узбекское образование.

**Annotatsiya.** Til o'rganish sohasi sun'iy intellekt texnologiyalarining tez rivojlanishi natijasida sezilarli darajada o'zgardi. Ushbu tadqiqot AI vositalarining til o'rganishdagi rolini, ayniqsa ingliz va o'zbek tillari misolida o'rganadi. Asosiy e'tibor o'rganish samaradorligi, individuallashtirish va qulaylikka qaratilgan. Tadqiqotda tavsifiy va taqqoslash metodologiyasi asosida AI asosidagi ilovalar, til o'rganish platformalari va aqlli o'qitish tizimlari o'quv muammolarini yengishda qanday yordam berishi tahlil qilinadi.

**Kalit so'zlar:** sun'iy intellekt, til o'rganish, raqamli vositalar, individuallashtirilgan ta'lim, ingliz-o'zbek ta'limi.

**Introduction.** Language learning has become increasingly important in the context of globalization and international communication. In fields such as education, business, and technology, effective language skills ensure successful interaction. However, learning a new language presents several challenges, including differences in grammar, vocabulary acquisition, and pronunciation.

One of the major difficulties in language learning is the variation in linguistic structures between languages. English and Uzbek, for example, differ significantly in syntax, morphology, and phonetics. According to Smith and Johnson (2021), these differences can slow down the learning process and create confusion for learners.

The emergence of artificial intelligence has transformed traditional language learning methods. AI-based tools such as language learning apps, chatbots, and intelligent tutoring systems are widely used in modern education. However, research on their effectiveness, especially for less-resourced languages like Uzbek, is still developing [Brown, 2020; 3]. This study aims to evaluate the advantages and limitations of AI tools in English and Uzbek language learning.

Language learning is particularly challenging due to the need for consistent practice and exposure. Learners often struggle with maintaining motivation and finding appropriate resources. AI tools address these challenges by providing interactive and adaptive learning environments. For instance, AI-powered applications can personalize learning content based on the learner's level and progress. This improves engagement and efficiency. According to Davis (2021), personalized learning systems significantly enhance language acquisition by adapting to individual needs.

Additionally, intelligent tutoring systems offer real-time feedback on grammar, pronunciation, and vocabulary usage. These systems help learners identify and correct mistakes immediately, leading to faster improvement. A comparison of English and Uzbek language learning reveals that English resources are more abundant and standardized, while Uzbek learning materials are still developing. This creates an imbalance in accessibility and learning opportunities. AI tools help bridge this gap by providing digital resources and automated support.

Despite their advantages, AI tools also have limitations. Over-reliance on technology may reduce critical thinking and independent learning skills. Furthermore, AI systems may not fully understand cultural and contextual nuances, which are essential in language learning. Therefore, human teachers remain essential in guiding learners and ensuring effective communication skills.

The findings of this study indicate that AI tools provide significant support in language learning, particularly in improving vocabulary acquisition and grammar accuracy. However, their effectiveness varies depending on the availability of linguistic data. In the case of Uzbek, limited digital resources reduce the accuracy of AI systems compared to English. Furthermore, while AI enhances independent learning, it may also lead to reduced interaction and communicative practice. Therefore, a balanced approach that combines AI technologies with traditional teaching methods is essential.

Previous studies have explored the integration of artificial intelligence in language learning from various perspectives. According to Brown (2020), AI technologies enhance learner autonomy by providing instant feedback and personalized content. Similarly, Davis (2021) emphasizes that adaptive learning systems significantly improve learner engagement and retention. Research by Smith and Johnson (2021) highlights the challenges of second language acquisition, particularly when structural

differences between languages are significant. In the context of Uzbek, Nurmukhamedov (2022) points out the lack of digital linguistic resources, which limits the effectiveness of AI-based tools. Despite these advancements, several scholars argue that AI cannot fully replace human interaction in language learning. O'Brien (2021) suggests that cultural and communicative competence still requires human guidance.

### **Conclusion.**

This study highlights the significant role of artificial intelligence in language learning, particularly in the context of English and Uzbek. AI tools enhance learning efficiency, provide personalized support, and increase accessibility to educational resources. However, they cannot replace human teachers, who play a crucial role in ensuring accurate and meaningful communication. The findings emphasize the importance of combining technological innovations with traditional teaching methods for optimal learning outcomes.

### **References**

1. Brown, T. (2020). Artificial intelligence in education. Cambridge University Press.
2. Davis, R. (2021). Personalized learning and AI technologies. *Educational Technology Review*, 15(2), 34–50.
3. Smith, J., & Johnson, L. (2021). Challenges in second language acquisition. Oxford University Press.
4. Nurmukhamedov, U. (2022). Development of linguistic resources in Uzbek language. *Central Asian Linguistic Review*, 5(2), 55–68.
5. O'Brien, S. (2021). Technology in language education: A new paradigm. Routledge.
6. MEYLIYEV, M. (2024). INGLIZ VA O'ZBEK TILLARIDA POLIMER TERMINLARINING FAOL SO'Z YASALISH USULLARI. «ACTA NUUZ», 1(1.1), 260-263. MEYLIYEV, M. (2024). INGLIZ VA O'ZBEK TILLARIDA POLIMER TERMINLARINING FAOL SO'Z YASALISH USULLARI. «ACTA NUUZ», 1(1.1), 260-263.
7. Meyliyev, M. . (2025). METHODS OF ACTIVE WORD FORMATION OF POLYMER TERMS IN ENGLISH AND UZBEK LANGUAGES. Универсальная индексная библиотека Евразийского журнала академических исследований, 4(12 Special Issue), 267–270. извлечено от <https://lib.uniconflix.com/index.php/uilejar/article/view/45103>