

ANALYSIS OF MODERN SCIENCE AND INNOVATION

USING ARTIFICIAL INTELLIGENCE TO ENHANCE ENGLISH LANGUAGE TEACHING

Omonova Umida Alijon kizi

Master's degree, Webster University in Tashkent omonovaumida1604@gmail.com

Annotation: This thesis explores the transformative potential of artificial intelligence (AI) in enhancing English language teaching. It examines various AI-powered tools and techniques currently employed in English language teaching, analyzing their effectiveness in addressing challenges related to personalized learning, automated feedback, and resource creation. The thesis also discusses the ethical considerations and potential limitations of integrating AI into ELT practices.

Keywords: Artificial intelligence, English language teaching, personalized learning, automated feedback, language assessment, AI-powered tools, educational technology, machine learning, natural language processing.

Introduction

The global demand for English language proficiency continues to grow, placing increasing pressure on educators to deliver effective and engaging instruction. Traditional teaching methods often struggle to cater to the diverse learning styles and needs of individual students. Artificial intelligence (AI), with its capacity for personalized learning, automated feedback, and efficient resource creation, offers a transformative potential for enhancing English language teaching (ELT). This thesis explores the various ways AI is being integrated into ELT, examining its benefits, challenges, and ethical implications.

Main part

The term artificial intelligence was introduced into science in 1956 by John McCarthy (McCarthy et al. 2006), which referred to intelligent digital technologies. Today, artificial intelligence has become a broad field, and it is also used in computer technology, philosophy, linguistics, psychology and other sciences. Based on the new requirements placed on artificial intelligence programs, this field can be defined in different ways. The current requirements for artificial intelligence can be divided into those that have the ability to think like a human (strong AI programs), programs that do not take into account the process of human thinking but perform tasks (weak AI programs), and those that take into account human thinking but do not set it as a goal for themselves.

In particular, as a change to traditional teaching methods, platforms using artificial intelligence (Chat GPT, Google AI, Bing AI, etc.) are being used for discussions. Using

ANALYSIS OF MODERN SCIENCE AND INNOVATION

artificial intelligence to generate ideas, increase attention during the lesson, stimulate interest through the use of new materials, and increase student achievement through feedback based on each student's individual needs (Dixon, 2017).

Another innovative application of AI in English language teaching is the integration of virtual reality (VR) into a language learning experience. AI-powered VR simulations immerse students in an English-speaking environment, allowing them to practice language skills in real-world contexts while developing cultural understanding (Lin et al. 2021). Research shows that integrating VR with language learning can enhance students' language acquisition and communication skills, offering a unique approach to language acquisition. However, it must be acknowledged that such devices, such as Apple Glass and Google Glass, are currently not affordable and cannot be widely adopted by all language learners.

While the new use of AI in teaching English to university students holds great promise, a number of challenges and considerations need to be addressed. These include ensuring the ethical use of AI in education, addressing data privacy concerns, and bridging the digital divide to ensure equal access to AI-powered learning tools for all students, regardless of socioeconomic background.

AI-powered platforms can adapt to individual learner needs, providing customized learning pathways and content. Adaptive learning systems analyze student performance, identifying strengths and weaknesses, and adjusting the difficulty and focus of subsequent exercises. This personalized approach ensures that students receive targeted instruction, maximizing their learning efficiency and engagement. Chatbots and virtual tutors can provide on-demand support, answering questions, offering explanations, and providing immediate feedback.

AI algorithms can automatically assess student work, providing rapid and consistent feedback on grammar, vocabulary, pronunciation, and fluency. This frees up teachers' time, allowing them to focus on more complex aspects of instruction and individual student support. AI-powered tools can analyze written assignments, identifying errors and suggesting improvements, while speech recognition technology can provide feedback on pronunciation. This automated feedback is particularly beneficial in large classes or online learning environments where individualized attention might be limited.

Artificial intelligence can be used to create and enhance ELT resources. Machine translation tools can assist in translating materials into different languages, making them accessible to a wider audience. AI can also generate quizzes, exercises, and other learning materials tailored to specific learning objectives and student needs. Furthermore, AI-powered tools can help teachers create personalized learning plans and track student progress efficiently.

ANALYSIS OF MODERN SCIENCE AND INNOVATION

While AI offers significant advantages, its integration into ELT also presents challenges. The accuracy of AI-powered assessment tools can vary depending on the complexity of the task and the quality of the data used to train the algorithms. Concerns about data privacy and the potential for bias in AI systems also need careful consideration. Furthermore, the over-reliance on technology could diminish the importance of human interaction and the role of teachers as mentors and facilitators of learning. The ethical implications of using AI in education require careful consideration to ensure fairness, transparency, and student well-being.

AI is a multifaceted technology with three user categories: (1) learner facing, used by pupils to learn; (2) teacher facing, used by teachers to help in teaching activities, for example, grading; and (3) system facing, which is used by administrative staff to manage and examine pupil data. Various AI technologies and systems provide affordances in ELT/L when targeting a specific user and objective. AI can mine large amounts of data, operate using natural language (speech, listening and writing) and follow rules and patterns of language.

Conclusion

In conclusion, Artificial intelligence is rapidly transforming the landscape of English language teaching. AI-powered tools and techniques offer significant potential for creating personalized learning experiences, providing efficient and consistent feedback, and enhancing the creation of educational resources. However, responsible integration requires careful consideration of the limitations and ethical implications. Successful implementation necessitates a balanced approach, combining the strengths of AI with the expertise and human touch of experienced educators. Future research should focus on refining AI algorithms to improve accuracy and address bias, as well as exploring best practices for integrating AI into ELT curricula to maximize its pedagogical benefits while safeguarding the crucial role of human interaction in the learning process.

REFERENCES:

- 1. Khujamkulov, D. Y., Zayniddinov, R. K. O., Ergashev, D. R., Mamatov, M. A., & Uktamov, K. F. (2021). Improving the Use of Islamic Banking Services in Financing Investment Projects in Uzbekistan. Revista geintec-gestao inovacao e tecnologias, 11(2), 2205-2220
- 2. Abdurakhmanov, K., Zikriyoev, A., Shadibekova, D., Khojamkulov, D., & Raimjanova, M. (2022, December). Limits and challenges of human resource technological talents in Al age. In Proceedings of the 6th International Conference on Future Networks & Distributed Systems (pp. 202-209).

ANALYSIS OF MODERN SCIENCE AND INNOVATION

- 3. Charos Uralova THE USE OF TRAINING COMPUTER PROGRAMS IN DISTANCE ENGLISH LESSONS // Scientific progress. 2021.
- 4. Rahima Alisher Qizi Korakulova, Charos Ganisherovna Uralova, Shakhribonu Akmalovna Abduvokhidova INTEGRATIVE L2 GRAMMAR TEACHING: EXPLORATION, EXPLANATION AND EXPRESSION // Scientific progress. 2021. №2.
- 5. Ahmadi, M. R. (2018). The use of technology in English language learning: A literature review. International Journal of Research in English Education, 3(2), 115–125. https://doi.org/10.29252/ijree.3.2.115
- 6. Annamalai, N., Eltahir, M. E., Zyoud, S. H., Soundrarajan, D., Zakarneh, B., & Al Salhi, N. R. (2023). Exploring English language learning via chabot: A case study from a self determination theory perspective. Computers and Education: Artificial Intelligence, 5, 100148. https://doi.org/10.1016/j.caeai.2023.100148

