

LANGUAGE LEARNING USING ARTIFICIAL INTELLIGENCE TOOLS (CHATGPT, CLAUDE)

Abduraimova Mohinisa

1st-year student, Applied Sciences program, Tashkent University of Applied Sciences

e-mail: abduraimovamohinisa@gmail.com

Scientific supervisor: **Sh.Y. Bobojonova**

Associate Professor, University of Tashkent for Applied Sciences

e-mail: shakhnoza.bobojonova@gmail.com

Abstract. This paper examines the transformative impact of Artificial Intelligence (AI) on contemporary foreign language acquisition. Drawing on a review of current scholarship and an analysis of widely used AI-powered tools — Large Language Models (LLMs) such as ChatGPT and Claude, chatbots, and adaptive learning platforms — the study identifies the principal pedagogical advantages of these technologies: individualized instruction, real-time corrective feedback enabled by Natural Language Processing (NLP), continuous accessibility, and a reduction of foreign language anxiety. It further outlines the technical foundations — neural networks, deep learning, and machine learning — that underpin their effectiveness, and discusses the limitations of AI, including the absence of genuine emotional intelligence, the risk of hallucinated or contextually inaccurate output, and the danger of learner over-dependence. The paper concludes that AI tools are most effective as a complement to, rather than a substitute for, human-guided instruction.

Keywords: Artificial Intelligence (AI), language learning, Natural Language Processing (NLP), machine learning, personalized education, neural networks, chatbots, large language models, digital ethics, foreign languages.

Introduction

Artificial Intelligence (AI), a term first proposed by John McCarthy in 1956, has evolved from an abstract scientific theory into one of the most influential forces in modern education. Over the past decade, and especially since the public release of generative tools such as ChatGPT and Claude, AI has begun to reshape the way individuals acquire foreign languages. By simulating aspects of human reasoning through complex statistical algorithms, these systems offer a personalized, flexible and continuously available learning environment that traditional classrooms — constrained by fixed schedules and high student-to-teacher ratios — could rarely provide.

The relevance of this subject is reinforced by the rapid global adoption of AI in everyday study practices, as well as by the growing scholarly attention devoted to its pedagogical potential and its risks. For learners of English and other foreign languages in particular, AI promises to bridge the long-standing gap between formal instruction and authentic communicative practice. At the same time, questions about the reliability, ethics and limitations of these tools remain unresolved. Accordingly, the present paper aims to examine the impact of AI tools on foreign language learning by reviewing the relevant literature, synthesising the main findings concerning their advantages and technical basis, and discussing their limitations and pedagogical implications.

Literature Review

The integration of Artificial Intelligence into language pedagogy has been the subject of extensive scholarly debate. Early research in Computer-Assisted Language Learning (CALL) focused primarily on static, rule-based software, but the emergence of Generative AI has shifted the focus toward dynamic, interactive learning environments. According to Hockly, Large Language Models such as ChatGPT represent a genuine paradigm shift in language education, offering learners a level of interaction that was previously possible only with a human tutor. In a complementary study, Kohnke, Moorhouse and Zou emphasise that AI tools facilitate autonomous learning, enabling students to take control of their linguistic development beyond the boundaries of the traditional classroom.

A recurring theme in the literature concerns the affective dimension of language learning. The concept of Foreign Language Anxiety (FLA), first introduced by Horwitz and colleagues, has been revisited in the context of AI. Building on the early observations of Fryer and Carpenter regarding the use of bots as conversation partners, recent LLM studies suggest that chatbots significantly reduce this anxiety: learners tend to feel more comfortable making mistakes when interacting with a machine rather than a human, which in turn accelerates the productive, or output, phase of language acquisition.

Not all assessments are optimistic. Chomsky has raised pointed concerns regarding the nature of AI-generated language, arguing that while LLMs are highly proficient at pattern recognition and statistical prediction, they lack true linguistic competence and any genuine understanding of grammar and meaning. In a similar critical vein, Zawacki-Richter and colleagues note that, although AI can personalise the pace of instruction, it often fails to address the socio-cultural nuances and idiomatic complexities inherent in natural languages. Broader educational research situates these debates within wider questions about the role of technology in teaching: Luckin examines the relationship between machine learning and human intelligence, Selwyn questions whether robots should replace teachers at all, and Holmes and Tuomi survey the state of the art and the ethical challenges of AI in education. Studies by Chen and colleagues and by Ng and colleagues further stress the importance of cultivating AI literacy among learners and educators, while Siemens connects these developments to the field of learning analytics.

Findings

The analysis of the reviewed tools and studies reveals several consistent advantages of AI in language acquisition. The first and most frequently cited is the individual approach. Unlike a traditional classroom, in which a single teacher must manage many students, AI models such as ChatGPT and Claude adapt to the specific needs and pace of each learner. These systems rely on Natural Language Processing (NLP) to interpret human speech and text, which allows them to provide real-time feedback. Platforms such as Duolingo and Babbel use machine learning to analyse a student's recurring errors and to generate tailored exercises that strengthen weak areas.

A second finding concerns accessibility. AI tools are available around the clock, so learners no longer need to wait for a scheduled lesson in order to practise. Chatbots function as pressure-free conversation partners, helping students to overcome the fear of making mistakes that so often inhibits spoken production. A third finding relates to retention: applications such as Quizlet and Memrise employ spaced-repetition algorithms supported by neural networks to ensure that vocabulary is transferred into long-term memory through optimised review cycles. Taken together,

these features make learning more multimodal, more flexible, and more closely aligned with individual goals.

The effectiveness of these tools rests on a clear technical foundation: deep learning and artificial neural networks, whose layered architecture loosely mimics the structure of the human brain. By processing vast amounts of structured and unstructured data, such systems learn to recognise linguistic patterns and to generate fluent, high-quality text. Modern Large Language Models, such as OpenAI's GPT series and Anthropic's Claude, use these mechanisms to summarise texts, translate between languages, and explain complex grammatical rules in accessible terms — capabilities that directly serve the language learner.

Discussion

While the findings confirm the considerable potential of AI, they must be weighed against significant limitations. The most fundamental of these is the absence of a human touch and of emotional intelligence. Machines do not possess feelings or consciousness; they cannot offer the empathy, encouragement and cultural insight that an experienced human teacher provides, all of which are central to sustained motivation. This limitation is closely connected to the socio-cultural and idiomatic gaps identified by Zawacki-Richter and colleagues, and to Chomsky's argument that statistical fluency is not the same as linguistic competence.

A second concern is reliability. AI systems can produce contextual errors or hallucinations — confident but incorrect statements — which, in a learning context, may translate into inaccurate grammatical explanations that a novice cannot easily detect. A third concern is the risk of technological dependency: learners who lean too heavily on automated translation and instant answers may neglect the development of their own cognitive and problem-solving skills. These risks raise important questions of digital ethics, including data privacy and equitable access, and they underline the need for AI literacy as a core competence for both students and teachers.

The pedagogical implication that emerges from this discussion is one of balance rather than replacement. As Selwyn and others argue, the role of the teacher does not disappear but evolves: the educator becomes a facilitator and curator who guides learners in using AI critically, verifies the accuracy of machine-generated content, and supplies the affective and cultural dimensions that technology cannot. Within such a blended model, AI tools serve as powerful assistants that enhance, rather than supplant, human-guided instruction.

Conclusion

In conclusion, AI tools such as ChatGPT and Claude are powerful assistants that make language learning more convenient, more multimodal, and more closely tailored to individual goals. Through NLP and machine learning they offer a unique bridge between theory and practice. Nevertheless, they should be regarded as a supplement to, rather than a replacement for, human interaction. To achieve true fluency, learners must combine the efficiency of AI with the social, cultural and emotional depth that only human communication can provide — and educators must guide that combination thoughtfully and ethically.

List of Used Literature

1. Baker, R. S. (2016). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Boston, MA: Center for Curriculum Redesign.

2. Chen, L., Chen, P., & Lin, Z. (2020). Artificial Intelligence in Education: A Review. *IEEE Access*, 8, 75264–75278.
3. Chomsky, N. (2023). The False Promise of ChatGPT. *The New York Times*, March 8.
4. Fryer, L. K., & Carpenter, R. (2006). Bots as Language Learning Tools. *Language Learning & Technology*, 10(3), 8–14.
5. Hockly, N. (2023). Artificial Intelligence in English Language Teaching: The Good, the Bad and the Ugly. *ELT Journal*, 77(4).
6. Holmes, W., & Tuomi, I. (2022). State of the Art and Practice in AI in Education. *European Journal of Education*, 57(4), 542–570.
7. Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125–132.
8. Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for Language Teaching and Learning. *RELC Journal*, 54(2), 537–550.
9. Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. London: UCL IOE Press.
10. McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (1955). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence.
11. Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI Literacy: An Exploratory Review. *Computers and Education: Artificial Intelligence*, 2, 100041.
12. Selwyn, N. (2019). *Should Robots Replace Teachers? AI and the Future of Education*. Cambridge: Polity Press.
13. Siemens, G. (2013). Learning Analytics: The Emergence of a Discipline. *American Behavioral Scientist*, 57(10), 1380–1400.
14. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic Review of Research on Artificial Intelligence Applications in Higher Education. *International Journal of Educational Technology in Higher Education*, 16(1), 39.
15. Zayniddinov, H. N., Khojakulov, T. A., & Atadjanova, M. P. *Artificial Intelligence (textbook)*. Tashkent.
16. BOBOJONOVA, S. (2024). Linguoculturology and concept. «ACTA NUUz», 1(1.4), 296-300.
17. Bobojonova, S. (2022). Pragmatic interpretation of educational discourse and expression of dialogic discourse in the communication process.
18. Dilnoza, A., & Shakhnoza, B. (2024). Interactive language learning strategies for enhancing vocabulary acquisition. *Eurasian Journal of Academic Research*, 4(7S), 62-66.