



EOC
EUROASIAN
ONLINE
CONFERENCES

GERMANY

CONFERENCE

**INTERNATIONAL CONFERENCE ON
SCIENCE, ENGINEERING AND
TECHNOLOGY**



Google Scholar

zenodo

OpenAIRE

doi = digital object
identifier

eoconf.com - from 2024

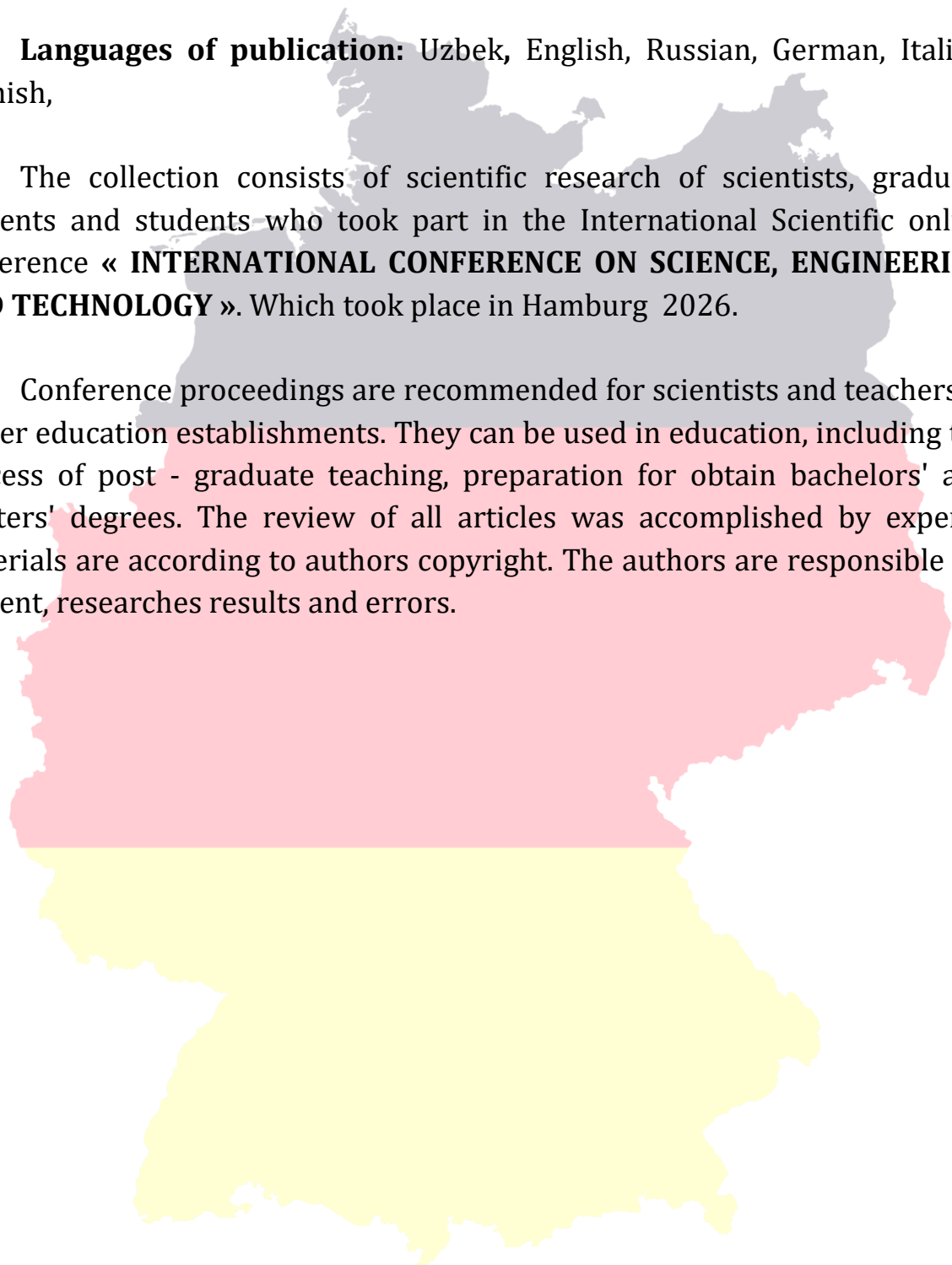


INTERNATIONAL CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY:
a collection scientific works of the International scientific conference –
Hamburg, Germany, 2026 Issue 5

Languages of publication: Uzbek, English, Russian, German, Italian,
Spanish,

The collection consists of scientific research of scientists, graduate students and students who took part in the International Scientific online conference « **INTERNATIONAL CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY** ». Which took place in Hamburg 2026.

Conference proceedings are recommended for scientists and teachers in higher education establishments. They can be used in education, including the process of post - graduate teaching, preparation for obtain bachelors' and masters' degrees. The review of all articles was accomplished by experts, materials are according to authors copyright. The authors are responsible for content, researches results and errors.





ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE LEARNING

SODIQOVA FARZONA MARDON QIZI

A second-year student of the Faculty of Pedagogy and Science-Humanitarian
Subjects,
The Field of Philology and Teaching Languages

Supervisor and teacher of Termez University of Economics and Service

MENGBOYEV AZIZBEK ALIJONOVICH

Abstract

Artificial Intelligence (AI) has become one of the most influential technologies in modern education. In recent years, AI-powered tools have transformed the process of teaching and learning English as a foreign language. Applications such as intelligent tutoring systems, chatbots, speech recognition software, and automated writing assistants provide learners with personalized and interactive learning experiences. This article explores the role of Artificial Intelligence in English language learning, its advantages, challenges, and future perspectives.

The study also discusses how AI improves vocabulary acquisition, grammar learning, pronunciation, speaking confidence, and learner motivation. Although AI cannot completely replace teachers, it significantly supports both students and educators by making language learning more effective, flexible, and accessible.

Keywords: Artificial Intelligence, English language learning, educational technology, EFL learners, language acquisition, digital learning.

Introduction

English has become an international language used in education, science, business, and communication worldwide. As globalization increases, the demand for learning English also continues to grow. Traditional teaching methods are still important, but technological development has introduced new ways of learning languages more efficiently. One of the most significant innovations is Artificial Intelligence (AI).



Artificial Intelligence refers to computer systems that can perform tasks requiring human intelligence such as learning, problem-solving, understanding language, and decision-making. In education, AI is increasingly used to create adaptive learning systems, virtual assistants, automated feedback tools, and language-learning applications.

Today, many students use AI-based platforms such as Duolingo, Grammarly, ChatGPT, Elsa Speak, and Google Translate to improve their English skills. These technologies provide immediate feedback, personalized exercises, and interactive communication opportunities. AI is especially useful for English as a Foreign Language (EFL) learners because it allows them to practice independently outside the classroom.

The purpose of this article is to analyze the role of Artificial Intelligence in English language learning, examine its advantages and disadvantages, and discuss its impact on modern education.

The Concept of Artificial Intelligence in Education

Artificial Intelligence is a branch of computer science that enables machines to simulate human intelligence. AI technologies can analyze data, recognize speech, understand text, and interact with users. In education, AI helps create smart learning environments where students receive personalized instruction according to their learning needs.

AI-based educational systems are designed to improve learning efficiency. Unlike traditional classrooms where one teaching method is applied to all students, AI systems adapt materials and tasks according to each learner's level and progress. This personalization increases student engagement and motivation.

According to Russell and Norvig, AI systems are capable of performing tasks that normally require human intelligence, including language understanding and problem-solving (Russell & Norvig, 2021). In language education, AI is widely applied in areas such as:



- Vocabulary learning
- Grammar correction
- Pronunciation practice
- Speaking assessment
- Writing assistance
- Translation

Interactive conversation practice

AI technologies are changing the traditional teacher-centered classroom into a learner-centered educational environment.

AI Tools Used in English Language Learning

Many AI-powered applications are currently used by English learners around the world. These tools help students practice different language skills effectively.

Duolingo

Duolingo is one of the most popular AI-based language learning platforms. It uses gamification and adaptive learning techniques to teach vocabulary, grammar, listening, and speaking. The system analyzes learner performance and adjusts lessons according to the user's progress.

Research shows that gamified AI platforms increase learner motivation and engagement because students enjoy completing tasks and receiving rewards (Loewen et al., 2019).

Grammarly

Grammarly is an AI writing assistant that helps learners improve grammar, punctuation, spelling, and writing style. It provides instant corrections and suggestions, allowing students to learn from their mistakes.

This tool is especially useful for academic writing because it improves clarity and accuracy. Students can develop better writing habits through continuous



feedback.

ChatGPT

ChatGPT is an AI chatbot capable of generating human-like conversations. English learners use ChatGPT for speaking practice, essay writing, vocabulary learning, and grammar explanations. The chatbot provides interactive communication opportunities that simulate real-life conversations.

AI chatbots reduce learner anxiety because students can practice English without fear of criticism. This creates a comfortable environment for language acquisition.

Elsa Speak

Elsa Speak is an AI-powered pronunciation application. It uses speech recognition technology to evaluate pronunciation accuracy and provide detailed feedback. Learners can improve stress, intonation, and fluency through repeated practice.

Pronunciation is one of the most difficult skills for EFL learners, and AI tools provide individualized pronunciation training that traditional classrooms often cannot offer.

Advantages of AI in English Language Learning

Artificial Intelligence offers many benefits in English education.

Personalized Learning

One of the greatest advantages of AI is personalization. Every student learns differently, and AI systems adapt lessons according to learner needs, pace, and performance.

For example, if a learner struggles with grammar, the AI system provides additional grammar exercises. If pronunciation is weak, pronunciation-focused tasks are recommended. Personalized learning increases efficiency and student satisfaction.



Immediate Feedback

Traditional classrooms may not always provide instant feedback because teachers work with many students at once. AI tools can instantly correct grammar mistakes, pronunciation errors, and vocabulary usage.

Immediate feedback helps learners recognize and correct errors quickly, improving language accuracy and retention.

[

Increased Motivation

AI applications often use gamification elements such as points, badges, and rewards. These features make learning more enjoyable and motivating. Students become more engaged when lessons feel interactive and entertaining. Motivation is a key factor in successful language learning.

Accessibility and Flexibility

AI-based learning platforms are accessible anytime and anywhere through smartphones and computers. Students can study independently outside the classroom according to their schedules.

This flexibility is especially important for university students and busy learners who may not have enough time for traditional courses.

Development of Speaking Skills

Many EFL learners lack opportunities to practice speaking English in real-life situations. AI chatbots and speech-recognition systems provide conversation practice without social pressure.

Students can repeat exercises multiple times until they feel confident. This repeated exposure improves fluency and speaking confidence.



Challenges and Limitations of AI

Although AI has many advantages, it also presents several challenges.

Lack of Human Interaction

Language learning is not only about grammar and vocabulary; it also involves emotions, cultural understanding, and human communication. AI systems cannot fully replace human teachers because they lack emotional intelligence and empathy.

Teachers motivate students, understand emotional needs, and encourage social interaction in ways that machines cannot.

Dependence on Technology

Excessive reliance on AI may reduce students' independent thinking and creativity. Some learners may become too dependent on translation tools and automated corrections instead of developing their own language abilities.

Therefore, AI should support learning rather than completely control it.

Technical Problems

AI systems require internet access, electronic devices, and digital literacy. In some regions, students may face technological limitations or poor internet connectivity. Technical issues can reduce the effectiveness of AI-based education.

Data Privacy Concerns

AI platforms often collect user data to personalize learning experiences. However, privacy and security issues remain important concerns. Educational institutions must ensure that student data is protected.

The Role of Teachers in the AI Era



Despite rapid technological development, teachers remain essential in education. AI cannot replace the human role in guiding, motivating, and emotionally supporting students.

Teachers and AI should work together to create more effective learning environments. AI handles repetitive tasks such as grading and corrections, while teachers focus on communication, creativity, and critical thinking.

According to Holmes et al. (2019), AI should be viewed as a supportive educational tool rather than a replacement for teachers. Educators must also develop digital skills to effectively integrate AI into classrooms.

Teachers can use AI tools to:

- Prepare interactive lessons
- Analyze student performance
- Create personalized assignments
- Improve classroom engagement
- Save time on administrative tasks

Thus, AI enhances the teaching process while teachers maintain the central role in education.

Future Perspectives of AI in Language Learning

The future of AI in English education appears highly promising. Advances in machine learning, natural language processing, and speech recognition technologies will continue improving language-learning systems.

Future AI systems may provide:

- More realistic conversational practice
- Better emotional recognition
- Fully personalized learning environments
- Virtual reality language immersion
- Advanced pronunciation analysis



AI may also help students with disabilities by offering adaptive learning solutions tailored to individual needs.

However, educational institutions should ensure balanced use of technology. Human communication and social interaction must remain important parts of language education.

Conclusion

Artificial Intelligence is transforming English language learning by making education more personalized, interactive, and accessible. AI-powered applications such as Duolingo, Grammarly, ChatGPT, and Elsa Speak help learners improve vocabulary, grammar, pronunciation, speaking, and writing skills effectively.

The major advantages of AI include personalized learning, immediate feedback, flexibility, and increased learner motivation. At the same time, challenges such as lack of human interaction, technological dependence, and privacy concerns must also be considered.

AI cannot replace teachers, but it can significantly support both educators and learners. The combination of human teaching and intelligent technology creates a more effective educational environment. As technology continues to develop, AI will likely play an even greater role in the future of English language education.



References

1. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Boston: Center for Curriculum Redesign.
2. Loewen, S., Isbell, D. R., & Sporn, Z. (2019). The effectiveness of app-based language instruction for developing receptive linguistic knowledge and oral communicative ability. *Foreign Language Annals*, 52(2), 209–233.
3. Russell, S., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson Education.
4. Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57–71.
5. Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. London: UCL Institute of Education Press.
6. Kukulska-Hulme, A. (2020). Mobile-assisted language learning. In C. Chapelle (Ed.), *The Concise Encyclopedia of Applied Linguistics*. Wiley-Blackwell.
7. Xu, W., & Ouyang, F. (2022). The application of AI technologies in English language teaching. *Education and Information Technologies*, 27(5), 6125–6145.
8. Zhao, Y. (2021). Artificial intelligence and language education: Challenges and opportunities. *Journal of Educational Technology Development and Exchange*, 14(1), 45–58.