



---

## **CONFERENCE ARTICLE**

### **CURRENT SOCIO-PEDAGOGICAL CHALLENGES IN IMPLEMENTING AND DEVELOPING GENERATIVE ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN THE PROCESS OF TEACHING ENGLISH IN HIGHER EDUCATION**

**Nigmatova Nozimaxon**

Independent researcher at Fergana State University, Uzbekistan

---

#### **ABSTRACT**

This article analyzes the current socio-pedagogical challenges associated with implementing and developing generative artificial intelligence technologies in the process of teaching English in higher education institutions. The study provides a research-based discussion of the impact of AI technologies on the educational process, including pedagogical, social, and ethical issues, as well as methodological constraints in their application. In addition, the necessary conditions and promising directions for the effective implementation of these technologies are identified.

#### **KEYWORDS**

Generative artificial intelligence, English language teaching, higher education, socio-pedagogical challenges, digital education, pedagogical innovations.

---

#### **INTRODUCTION**

Processes of digital transformation and globalization are fundamentally changing the directions of development in modern education systems. The rapid advancement of information and communication technologies, along with the increasing integration of artificial intelligence systems into educational practice, requires higher education institutions to reconsider the content, forms, and methods of instruction. In particular, the status of English as a language of international communication, science, and technology further increases its role and significance in higher education.

Today, teaching English is understood not only as the acquisition of linguistic knowledge but also as a priority task aimed at developing students' communicative, academic, and digital competencies. From this perspective, the introduction of generative AI technologies into the educational process is emerging as a significant pedagogical resource for improving the effectiveness of English language instruction, individualizing learning, and expanding opportunities for students' independent study. However, the practical implementation of generative AI technologies also gives rise to a number of social and pedagogical problems. A thorough scientific analysis of these challenges, identification of their underlying causes, and development of effective solutions constitute one of the urgent tasks facing the higher education system.

Generative artificial intelligence technologies are grounded in theories of artificial intelligence, machine learning, and natural language processing. These technologies are capable of analyzing large volumes of language data and generating new texts, dialogues, and exercises on that basis, thereby significantly expanding the didactic potential of the educational process.

In linguistics, the theory of generative grammar developed by Noam Chomsky interprets language not as something limited to a set of rules, but as a creative and dynamic system. This concept forms the linguistic basis of generative AI models and creates a

foundation for shaping new approaches to language learning.

From a pedagogical perspective, generative AI technologies are closely linked to constructivist and learner-centered education paradigms. According to the social development theory of psychologist Lev Vygotsky, knowledge is formed through communication and collaboration. AI-based interactive learning environments support active engagement between students and educational content, contributing to increased cognitive activity and motivation.

The process of implementing generative artificial intelligence technologies in the higher education system is closely intertwined with social factors. One of the most significant challenges is digital inequality, as not all students and teachers have equal and effective access to modern technologies. This situation may lead to disparities in educational quality and learning outcomes. In addition, excessive reliance on AI technologies may potentially weaken students' independent thinking, critical analysis, and creative skills. As emphasized by foreign researchers, technology should be applied as a supportive tool in the learning process, but it should not fully replace students' cognitive activity. Furthermore, issues of academic integrity, copyright, and ethical responsibility require particular attention when using generative AI. Ensuring transparency in the process of mastering and assessing materials produced with the assistance of AI is one of the pressing social concerns.

From a pedagogical standpoint, introducing generative AI technologies into the educational process requires a reconsideration of the teacher's traditional role. According to methodology scholar Jack C. Richards, technologies should not completely replace the teacher; rather, they should serve as a tool that expands the teacher's methodological capabilities.

In practice, pedagogical challenges arise due to insufficient methodological preparedness of teachers to use AI technologies

and the fact that existing curricula are not fully integrated with these technologies. Therefore, the use of generative AI in teaching English should be carried out on the basis of clear methodological guidelines, pedagogical norms, and didactic requirements.

To ensure the effective implementation of generative AI technologies in English language teaching, it is advisable to prioritize the following directions:

systematically developing teachers' digital and AI-related competencies;

methodologically aligning generative AI technologies with curricula and course content; designing mechanisms for use grounded in academic integrity and ethical standards; introducing pedagogical strategies that support students' independent, critical, and creative thinking.

### **Conclusion**

In conclusion, implementing generative artificial intelligence technologies in the process of teaching English in higher education institutions is one of the key factors in the development of modern education. However, this process is inseparable from social and pedagogical challenges, which require scientific analysis and resolution through a systematic approach. Conscious, goal-oriented, and methodologically grounded use of generative AI technologies contributes to improving the quality of English language instruction, individualizing the educational process, and ensuring the sustainable development of a digital learning environment.

### **References**

1. Chomsky N. *Aspects of the Theory of Syntax*. – Cambridge: MIT Press, 1965. – 251 p.
2. Vygotsky L.S. *Mind in Society: The Development of Higher Psychological Processes*. – Cambridge: Harvard University Press, 1978. – pp. 79–91.
3. Richards J.C., Rodgers T.S. *Approaches and Methods in Language Teaching*. – 3rd ed. – Cambridge: Cambridge University Press, 2014. – pp. 23–45.
4. Holmes W., Bialik M., Fadel C. *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. – Boston: Center for Curriculum Redesign, 2019. – pp. 41–67.
5. Warschauer M., Healey D. *Computers and Language Learning: An Overview*. – *Language Teaching*, 1998. – Vol. 31, No. 2. – pp. 57–71.