THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF USING ARTIFICIAL INTELLIGENCE IN TEACHING ENGLISH IN HIGHER EDUCATION

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Abstract: This article explores the theoretical and methodological foundations of using artificial intelligence (AI) in teaching English in higher education institutions. It examines the role of AI in improving language learning, developing students' communicative competence, and supporting personalized instruction. The study highlights the application of AI-based educational tools and their potential to enhance teaching effectiveness and student engagement. It also addresses key challenges, including ethical concerns, limited digital literacy, and the risk of overdependence on technology. Based on the analysis, practical recommendations are proposed for integrating AI into English language teaching. The article concludes that the effective and responsible use of AI can improve the quality of English language education and support more flexible, student-centered learning.
Keywords: artificial intelligence, English language teaching, higher education, digital education, generative AI.

Introduction

The development of digital technologies has changed the way education is delivered. Artificial intelligence (AI) is now widely used in higher education to support teaching, improve learning outcomes, and meet students' individual needs. In English language teaching, AI can help students improve their vocabulary, pronunciation, writing, and speaking skills. It also allows teachers to provide more personalized learning experiences and feedback. However, the effective use of AI requires appropriate teaching methods. Issues such as digital literacy, ethical considerations, and overreliance on technology should also be taken into account. Therefore, this study aims to examine the theoretical and methodological foundations of using artificial intelligence in English language teaching in higher education and to identify ways to integrate AI tools effectively into the learning process.

Literature Review

The integration of generative artificial intelligence technologies into English language teaching in higher education institutions is a significant research issue closely related to modern pedagogy, digital didactics, and

foreign language teaching methodology. The effective use of these technologies plays an important role in personalizing the learning process, enhancing students' cognitive engagement, creating learning environments that meet their individual needs, and implementing the competency-based approach in practice.

The analysis of theoretical and empirical studies in this field helps identify scientifically grounded opportunities for incorporating AI technologies into English language teaching methodology.

According to Lev Vygotsky's sociocultural theory of development, the effectiveness of learning is closely associated with organizing the educational process in accordance with the learner's zone of proximal development. This approach can serve as a theoretical foundation for using AI tools in English language teaching, as these technologies can provide tasks and feedback tailored to students' individual abilities and learning needs.

From the perspective of constructivist learning theory, artificial intelligence (AI) technologies support students not only in acquiring knowledge but also in actively exploring, analyzing, and connecting new information with their existing knowledge. In this process, students become active participants in learning, while teachers take on the role of facilitators who guide and support their educational development. AI-based tools can adapt learning tasks to students' proficiency levels, learning pace, and individual needs. This approach is also consistent with Vygotsky's sociocultural theory, which emphasizes the importance of social interaction, guidance, and gradual support in the development of knowledge and skills.

In English language teaching, the use of AI creates new opportunities not only for learning grammar but also for developing students' listening comprehension, speaking, writing, and independent thinking skills. For example, AI-powered conversational systems allow students to simulate real-life situations and practise communicating in English. Writing analysis tools can identify grammatical errors and help students improve textual coherence and overall clarity. Pronunciation analysis applications provide opportunities for independent practice in areas such as individual sounds, word stress, and speech fluency. Furthermore, adaptive learning platforms can adjust the difficulty of tasks according to students' performance, enabling them to focus more on topics they find challenging.

The development of generative artificial intelligence has further expanded these opportunities. In particular, generative AI can be used to create learning materials for students at different proficiency levels, develop dialogues based on professional and everyday situations, facilitate discussions, and design individualized learning activities. For instance, students specializing in English

philology can use AI tools to analyze literary texts, improve their academic writing, and develop their ability to participate in scholarly discussions. However, certain risks must also be considered, including the uncritical acceptance of AI-generated information, excessive reliance on ready-made answers, and the potential decline of independent thinking. Therefore, the integration of these technologies into education should be accompanied by a strong emphasis on critical thinking, information literacy, and academic integrity.

International experience demonstrates growing interest in the potential of artificial intelligence and digital technologies in education. Countries such as South Korea, Singapore, and the United States have been focusing on the development of digital learning solutions, intelligent educational systems, and personalized learning tools. These experiences suggest that the implementation of AI in higher education should not be limited to the introduction of technological innovations. Instead, AI technologies should be integrated with educational objectives, teaching methodologies, and student assessment criteria.

In general, artificial intelligence offers significant opportunities to personalize English language education, provide timely feedback, and develop students' communicative competence. However, its effectiveness depends not simply on the technology itself but on the pedagogical purposes it serves and the way it is implemented. Therefore, higher education institutions should seek to integrate AI with traditional teaching methods, strengthen teachers' digital competencies, and prepare students to use these technologies responsibly and effectively.

Analysis And Results

The analysis demonstrates that artificial intelligence enhances English language teaching in higher education through personalized learning, automated assessment, and interactive educational activities. Intelligent tutoring systems adapt exercises to students' proficiency levels, while AI-based assessment tools help evaluate grammar, vocabulary, and text coherence.

Furthermore, generative AI and speech recognition technologies support the development of writing, speaking, and pronunciation skills by providing interactive practice and immediate feedback. However, despite these advantages, AI cannot fully replace teachers' professional judgment, emotional support, and classroom interaction. Therefore, its effectiveness depends on the appropriate integration of technology with pedagogical methods. AI should be considered a complementary tool that promotes learning efficiency, student autonomy, and the development of communicative competence.

Another important aspect is the development of critical thinking and digital literacy. Students should learn not only how to use AI tools but also how to evaluate the accuracy and reliability of the information they provide. Overreliance on AI-generated content may reduce students' independent thinking and creativity if these technologies are used without proper guidance. For this reason, teachers should encourage students to use AI as a source of support rather than as a substitute for their own ideas and efforts.

Moreover, the successful implementation of AI in English language education requires adequate teacher training, reliable digital infrastructure, and clear ethical guidelines. Issues such as data privacy, academic integrity, and equal access to technology should be carefully considered. Combining AI-based tools with traditional teaching methods can help maintain a balance between technological innovation and meaningful human interaction. Thus, the effective use of artificial intelligence can improve the quality of English language education, promote learner autonomy, and support the development of students' communicative competence.

Conclusion And Recommendations

The research highlights the significant potential of artificial intelligence to improve English language teaching in higher education through personalized learning, automated assessment, and interactive language practice. To ensure the effective implementation of these technologies, universities should develop clear AI integration strategies and provide teachers with appropriate training. Establishing ethical guidelines and improving digital infrastructure are also essential for ensuring responsible and accessible AI use. Furthermore, combining traditional teaching methodologies with AI-supported approaches can create a more flexible and student-centered learning environment. Teachers should maintain an active role in monitoring learning progress, evaluating students' performance, and developing their communicative competence. Further research into the pedagogical applications of generative AI is also necessary to identify effective teaching practices and potential challenges. Implementing these recommendations can improve educational quality, strengthen digital competencies, and modernize English language instruction in higher education institutions.

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