

The Role of Artificial Intelligence in English Language Teaching

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Abstract. *In the modern era, the rapid development of information technologies has led to significant innovations in the field of education. In particular, the application of artificial intelligence technologies has created new opportunities in foreign language teaching and has made the process of teaching English more effective, interactive, and personalized. Artificial intelligence-based platforms and applications play an important role in improving students' language skills. Through these technologies, students' listening, speaking, reading, and writing abilities are developed more systematically while taking into account their individual needs and learning levels.*

The study also examines several challenges arising from the implementation of artificial intelligence in education. These include the lack of technological equipment, low levels of digital literacy, difficulties faced by teachers in adapting to new technologies, and ethical issues. At the same time, it is emphasized that when used properly, artificial intelligence can significantly contribute to improving the quality of education, enhancing students' academic performance, and creating a modern educational environment.

The expansion of artificial intelligence technologies in modern educational institutions contributes to the development of students' language skills and increases global communication opportunities.

Keywords: *artificial intelligence, english language teaching, digital education, interactive learning, chatbots, virtual teacher, language skills, innovative technologies, e-learning, personalized learning, speech recognition systems, educational technologies*

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İngilis dilinin tədrisində süni intellektin rolu

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Xülasə. *Müasir dövrdə informasiya texnologiyalarının sürətli inkişafı təhsil sahəsində mühüm yeniliklərin yaranmasına səbəb olmuşdur. Xüsusilə süni intellekt texnologiyalarının tətbiqi xarici dil tədrisində yeni imkanlar açmış və İngilis dilinin öyrədilməsi prosesini daha effektiv, interaktiv və fərdiləşdirilmiş hala gətirmişdir. Süni intellekt əsaslı platformalar və proqramlar tələbələrin dil bacarıqlarının inkişaf etdirilməsində mühüm rol oynayır. Bu texnologiyalar vasitəsilə tələbələrin dinləmə, danışma, oxu və yazı bacarıqları daha sistemli şəkildə inkişaf etdirilir, onların fərdi ehtiyacları və öyrənmə səviyyələri nəzərə alınır.*

Tədqiqatda həmçinin süni intellektin tətbiqi zamanı yaranan bəzi problemlər də araşdırılmışdır. Bunlara texnoloji avadanlıqların çatışmazlığı, rəqəmsal savadlılıq səviyyəsinin aşağı olması, müəllimlərin yeni texnologiyalara uyğunlaşma çətinlikləri və etik məsələlər daxildir. Bununla yanaşı, qeyd olunur ki, düzgün istifadə olunduğu halda süni intellekt tədrisin keyfiyyətinin yüksəldilməsinə, tələbələrin akademik göstəricilərinin yaxşılaşmasına və müasir təhsil mühitinin formalaşmasına mühüm töhfə verir.

Müasir təhsil müəssisələrində süni intellekt texnologiyalarının tətbiqinin genişləndirilməsi tələbələrin dil bacarıqlarının inkişafına və global kommunikasiya imkanlarının artırılmasına xidmət edir.

Açar sözlər: *süni intellekt, ingilis dili tədrisi, rəqəmsal təhsil, interaktiv öyrənmə, chatbotlar, virtual müəllim, dil bacarıqları, innovativ texnologiyalar, elektron təhsil, fərdiləşdirilmiş təlim, nitq tanıma sistemləri, təhsil texnologiyaları*

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Introduction

In the twenty-first century, rapid developments in information and communication technologies have significantly transformed almost every sphere of human life, including education. The integration of digital technologies into educational systems has changed traditional teaching methods and created more flexible, interactive, and student-centered learning environments. Among the most influential technological innovations of recent years, artificial intelligence has emerged as one of the most important tools shaping the future of education. Artificial intelligence, commonly referred to as AI, is a branch of computer science that enables machines and software systems to simulate human intelligence, learn from data, solve problems, make decisions, and perform tasks that normally require human cognitive abilities. Today, AI technologies are increasingly being applied in different fields such as healthcare, finance, transportation, engineering, and especially education (Brown, 2014).

The role of artificial intelligence in education has become more visible due to the growing need for effective, personalized, and accessible learning opportunities. Traditional educational systems often face challenges in addressing the individual learning needs of students because learners differ in their abilities, interests, learning speeds, and educational backgrounds. In this context, artificial intelligence provides innovative solutions that can help educators improve teaching quality and support students more efficiently. AI technologies allow educational institutions to create adaptive learning environments where instructional materials, assessments, and teaching strategies can be customized according to the needs of each learner. As a result, students can receive more personalized instruction and achieve better academic outcomes (Chapelle, 2009).

One of the educational fields most affected by artificial intelligence is foreign language teaching, particularly English language teaching. English has become the dominant international language used in global communication, science, business, diplomacy, technology, tourism, and higher education. In today's globalized world, proficiency in English is considered an essential skill that provides individuals with better educational, professional, and social opportunities (Crystal, 2012).

Therefore, improving the quality and effectiveness of English language teaching has become a major priority for educational institutions around the world. Traditional methods of teaching English, while

still valuable, may not fully meet the demands of modern learners who require more engaging, interactive, and technology-supported learning experiences. Artificial intelligence technologies have introduced new possibilities that can enhance language teaching and learning processes in various ways (Harmer, 2015).

Research

Artificial intelligence plays a significant role in improving the four fundamental language skills: listening, speaking, reading, and writing. AI-powered applications and platforms offer interactive exercises, instant feedback, speech recognition systems, automated translations, grammar correction tools, vocabulary-building activities, and intelligent tutoring systems that help students practice English more effectively. For example, speech recognition technologies enable learners to improve their pronunciation by analyzing spoken language and providing immediate corrective feedback. Similarly, AI-based writing assistants can identify grammatical mistakes, suggest vocabulary improvements, and help students develop better writing skills. Such technologies make language learning more dynamic, engaging, and learner-centered (Holmes et al., 2019).

Another important contribution of artificial intelligence to English language teaching is the development of personalized learning environments. AI systems can analyze students' performance, identify their strengths and weaknesses, monitor their progress, and provide customized learning materials according to their individual needs. This personalized approach increases student motivation and improves learning efficiency because learners can study at their own pace and focus on areas where they need more practice. Unlike traditional classroom settings where teachers may have limited time to address every student's needs individually, AI technologies can offer continuous support and guidance to learners outside the classroom as well (Woolf, 2010).

In addition to benefiting students, artificial intelligence also supports teachers in many aspects of the educational process. Teachers can use AI tools to prepare lesson plans, create educational materials, assess students' assignments, analyze learning outcomes, and manage classroom activities more effectively. Automated grading systems, for instance, reduce teachers' workload and allow them to spend more time on creative and interactive teaching activities. AI can also assist teachers in identifying students who may be struggling academically and provide recommendations for improving their learning experiences. Consequently, artificial intelligence does not replace teachers but rather serves as a supportive tool that enhances teaching effectiveness and educational productivity.

Moreover, the use of artificial intelligence in English language teaching promotes independent and lifelong learning. Students can access AI-supported educational applications anytime and anywhere through computers, smartphones, and online platforms. This flexibility allows learners to continue practicing English outside formal classroom environments and develop self-learning habits. AI-powered chatbots and virtual assistants can simulate real-life conversations, helping students improve their communication skills and gain confidence in using English in practical situations. Such interactive learning experiences are especially beneficial for students who may not have enough opportunities to practice English with native speakers. Limited internet access, insufficient digital devices, and inadequate technical support can prevent the effective integration of AI technologies into classrooms. Another challenge is the low level of digital literacy among some teachers and students. Many educators may not have sufficient training or experience in using advanced technological tools, which can limit the successful application of AI in teaching processes. Ethical and privacy issues also represent important concerns related to artificial intelligence in education. AI systems often collect and analyze large amounts of personal data about students, including their learning behaviors, academic performance, and online activities. Therefore, protecting students'

privacy and ensuring the ethical use of data have become essential issues that educational institutions must address carefully (Luckin, 2018). The relevance of studying the role of artificial intelligence in English language teaching is increasing day by day because educational systems worldwide are moving toward digital transformation. Governments, universities, schools, and educational organizations are investing heavily in educational technologies to improve teaching quality and prepare students for the demands of the modern world (Richards & Rodgers, 2014). AI technologies contribute to the development of students' language skills, increase motivation, support teachers, and promote independent learning (Russell & Norvig, 2021).

At the same time, challenges related to infrastructure, digital literacy, ethics, and data privacy must be carefully addressed to maximize the benefits of AI in education. The future of English language teaching will likely involve a closer collaboration between human educators and intelligent technologies, leading to more effective, accessible, and learner-centered educational systems. (Sharma & Barrett, 2007). Therefore, investigating the role of artificial intelligence in English language teaching is highly important for understanding how modern technologies can improve language education and meet the needs of future generations.

Conclusion

In conclusion, artificial intelligence has become one of the most influential technological innovations in modern education and has significantly transformed the process of English language teaching (Woolf, 2010). The integration of AI technologies into educational environments has created new opportunities for both teachers and students by making language learning more interactive, personalized, flexible, and effective. AI-supported systems provide learners with immediate feedback, individualized instruction, adaptive learning materials, and continuous access to educational resources, which contribute greatly to the improvement of language skills such as listening, speaking, reading, and writing (Siemens & Baker, 2012).

One of the major advantages of artificial intelligence in English language teaching is its ability to support personalized learning. Traditional teaching methods often face limitations in addressing the diverse needs and learning styles of students. However, AI technologies can analyze learners' performance, identify their strengths and weaknesses, and offer customized learning experiences according to their individual progress. This personalized approach increases student motivation, encourages active participation, and helps learners achieve better academic results. Students are able to study at their own pace and receive targeted support in areas where improvement is needed. (Warschauer, 2011).

The future of English language teaching will likely involve a greater integration of artificial intelligence technologies into classrooms and online learning environments. As technology continues to evolve, more advanced AI applications are expected to emerge, offering even more sophisticated learning opportunities and educational solutions. Consequently, educational systems must adapt to these changes by investing in technological infrastructure, improving digital literacy, and developing effective strategies for AI integration.

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