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**Nataliia Vasylyshyna,  
D.Sc. in Pedagogics, Professor,  
Professor of the Foreign Languages and Translation Department,  
Faculty of Law and International Relations,  
State University “Kyiv Aviation Institute”,  
Ukraine, Kyiv  
e-mail: filologyN@gmail.com**

**DIGITALIZATION OF FOREIGN LANGUAGE EDUCATIONAL  
ENVIRONMENT: ARTIFICIAL INTELLIGENCE TOOLS  
IMPLEMENTATION FOR MODERN UNIVERSITY LEARNERS  
WITHIN ENGLISH COURSES STUDY**

The actuality of this piece of linguistical-pedagogical research was defined by the array of factors, one of them is the presence of English professional courses in university programs and curriculums titled as “Business English”, “Theory and Practice of Translation”, “Foreign Language for Specialty”, “Foreign Language (Basic Course)”, “Foreign Language (Normative Course)” and even “Translation Practice” at Faculty of International Relations requires constant their improvement for preparation of educated and globally demanded, competitive specialists in Ukraine.

The matter is that post Covid and War Periods have introduced huge changes in the life of Ukraine that have been also reflected in the area of high education, in particular technological tools, Google Classes. Meets, Zoom, AI active implementation in daily professional collaboration.

Thus, in order to adapt to modern global changes educators should or sometimes have to introduce novelties, innovations into teaching process keeping it contemporary, competitive and effective.

Artificial Intelligence (AI) is a technological advancement that significantly benefits humanity by alleviating the burden of labor. This technology finds applications across various sectors, including healthcare, education, electronics, software development, pharmaceuticals, gaming, engineering, communication, and overall development. The term 'artificial intelligence' is derived from two components: 'artificial,' which denotes man-made, and 'intelligence,' which refers to the capacity for thought.

Thus, artificial intelligence can be defined as a branch of computer science focused on creating intelligent machines that can emulate human behavior, think logically, and make decisions based on programmed logic. AI is a scientific discipline that aims to enhance machines to solve complex problems in a manner akin to human reasoning. Essentially, it involves the adoption of human-like characteristics, allowing computers to be directed through algorithms.

The significance of AI extends to both individuals and society, as it reduces human workload and enables task completion through machines or devices. A committee of scientists evaluates the progress of AI every five years to monitor its development. AI stands out as a transformative technology in computing, poised to initiate a revolutionary

change by creating intelligent machines. It encompasses the programming of robots to perform designated tasks. Since the mid-20th century, researchers have endeavored to establish systems capable of executing tasks traditionally associated with human intelligence.

In essence, AI embodies the replication of human cognitive processes in machines designed to think and act like humans, primarily aimed at addressing problems in a human-like manner, such as operating vehicles (Horvitz, E., 2022).

*Artificial intelligence (AI), the ability of a computer or computer-controlled robot to complete the tasks mainly associated with intelligent beings.*

*Artificial intelligence (AI) refers to the capability of a computer or robot controlled by a computer to perform tasks typically associated with intelligent beings.*

The *primary objectives of AI include:*

1) developing computers that can perceive, hear, walk, communicate, and experience emotions. A significant focus of AI is to create computer functions that emulate human intelligence, encompassing thinking, learning, and problem-solving abilities.

2) Establishing Expert Systems—devices or machines that exhibit intelligent behavior, capable of learning, reasoning, explaining, and providing recommendations to users.

3) Integrating human-like intelligence into computers—designing systems that can comprehend, think, learn, and act similarly to humans (Copeland, J., 2023).

The *advantages of AI include:*

- reducing human labor by substituting machines for people, allowing individuals to engage in different tasks;

- alleviating the burden of programming and self-modifying tasks; functioning as a cost-effective labor source, thereby accelerating work processes and increasing profits;

- ease of deployment; machines not requiring breaks or refreshments like humans; the ability to be reprogrammed for extended periods without fatigue or boredom;

- the application of robotics and AI in mining and fuel exploration, which can safeguard human lives, as humans can create robots, but not vice versa. AI can be utilized in various industries and companies (Edmett, A., Ichaporia, N., Crompton, H., & Crichton, R., 2024).

However, there are *disadvantages*, such as:

- the complexity and high cost of developing machines due to expensive equipment;

- the significant financial and temporal investment required for creation, reconstruction, and maintenance;

- the potential for AI to foster laziness in humans by automating most tasks, leading to dependency on technology that may pose challenges for future generations.

The *application of artificial intelligence (AI) in English-speaking activities* has highlighted pronunciation as a crucial sub-skill, as evidenced by various studies examining AI's role in speaking. Numerous AI-driven systems and programs are accessible to learners, with pedagogy concerning speaking instruction also identified as a

significant area of interest. AI has been utilized as a conversational partner, language coach, and in a multimodal capacity.

Research indicates that AI fosters meaningful interactions, aids in vocabulary acquisition, enhances language skills, and offers engaging and enjoyable learning experiences. Additional studies have emphasized the effectiveness of coaching and multimodal systems that utilize diverse methods to convey information, including text, images, audio, and video. Technologies aimed at improving speaking skills encompass AI applications for speech recognition, adaptive learning, automatic speech analysis, and voice assistance (Naik, P., 2021).

Certain systems enable learners to practice, record, and respond to their pronunciation of words, leading to improved vocabulary retention and notable advancements in mastering consonant and vowel sounds. In the realm of English writing activities, AI's application primarily focuses on vocabulary enhancement and grammar improvement. A prevalent use of AI in writing involves grammar checkers.

The pedagogical emphasis on providing feedback emerged as a key aspect of AI's role in writing skills. Investigations into writing pedagogy frequently linked AI tools that offer feedback through spelling and grammar checkers, such as Grammarly, which serves as a feedback mechanism for English language learners. These studies reported favorable outcomes, including enhanced behavioral, emotional, and cognitive engagement, alongside increased self-efficacy in writing. A range of AI technology tools has been employed to bolster writing skills, including grammar checkers, writing assistants, translation tools, and pattern checkers (Edmett, A., Ichaporia, N., Crompton, H., & Crichton, R., 2024).

Also, using Google Translate helped less-skilled learners to display a level of writing proficiency that was not significantly different from that of skilled learners. It also found that machine translation aided learners to produce essays with a greater number of lower-frequency, more complex words and higher-quality syntax.

The *application of AI in English reading activities* has been explored, albeit less frequently than its application in the productive skills of speaking and writing. While vocabulary development was a primary focus, gaming emerged as a notable pedagogical tool. The results indicate that learners can enhance their vocabulary and comprehension through games, offering contextualized experiences that traditional textbooks or classroom settings may not provide. This suggests a significant potential for AI technologies to enrich language learning experiences.

In conclusion, the discussion highlights that AI technologies can facilitate human activities, and their future integration may yield competitive advantages. Regarding practical implications of AI, it is essential for English language teacher education to incorporate AI literacy, enabling educators to equip students with an understanding of AI's limitations and ethical considerations. Furthermore, careful selection of AI models is crucial to avoid perpetuating biases in language representation. AI can serve as a conversational partner, providing language practice outside the classroom and reducing anxiety in learners (Shankar, S., 2021).

However, further research is necessary to determine the long-term effectiveness of AI tools. It is also vital to establish clear ethical guidelines for AI use in English Language Teaching (ELT) and ensure data privacy. Practitioners should maintain realistic expectations about AI's current capabilities and remain cautious of exaggerated claims.

All in all, considering the benefits and drawbacks of AI within teaching English courses at modern university, such as learner-generated context creation, self-autonomous learning experiences, learning autonomy, self-regulation, self-study, independent English learning, additional practice, motivation and topic engagement, there still present the challenges as well as risks during AI usage such as anxiety, plagiarism, academic integrity, weakening of mental activities, cheating, laziness, discouragement from subject study and also resource consuming (Naik, P., 2021).

As a recommendation from the practical experience, it might be mentioned that AI should be used along with personal teaching and interaction between tutors and students keeping in mind that AI is a supplementary tool like computer, coursebooks, dictionaries, but not a replacement, substitute for human mental operations.

Moreover, learners must be aware of potential AI in ELT risks like imprecise or incorrect translation, technology addiction, ethical issues, privacy violations, restraining from critical thinking skills development.

Consequently, balanced approach in the frame of expository learning must be used for rational and effective AI implementation during English language teaching, in other words AI must be equaled to external, outside artificial skeleton, augmentative intelligence (AI).

### **References**

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