

CHATGPT IN MARITIME ENGLISH LESSONS

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The process of technologization of the educational environment in higher education institutions opens new perspectives for the professional activities of academic and pedagogical staff. Artificial intelligence emerges as one of the most significant scientific and technological breakthroughs of the present time, sparking active discussions in various fields, including education, about its potential capabilities, directions for improvement, and practical applications.

The integration of innovative educational technologies, particularly the implementation of artificial intelligence systems in the teaching process of Maritime English, marks a new stage in the development of pedagogical science. The use of artificial intelligence tools capable of analyzing the individual characteristics of educational activities allows for the creation of personalized learning tasks and didactic materials tailored to the level of preparation and learning style of each higher education student.

The purpose of this article is to explore the effectiveness of ChatGPT in Maritime English teaching for improving communication skills, language accuracy, and personalized learning.

Among the most promising developments based on neural network technologies, it is worth highlighting ChatGPT (Generative Pre-trained Transformer), developed by the research laboratory OpenAI. This large-scale language model operates in a conversational mode, maintaining the context of previous interactions, which ensures a coherent, logically connected communication, unlike traditional chatbots, which lack such a capability.

Given the relatively recent spread of ChatGPT among Ukrainian users, the issue of its impact on the effectiveness of the learning process, as well as the specifics of integrating this tool into the practice of learning Maritime English by higher education students in Ukraine, remains insufficiently explored.

The issue of applying artificial intelligence (AI) in the educational process is a subject of close attention from scholars working in the fields of pedagogy, linguistics, and related disciplines.

For instance, O. Zubenko says that the integration of AI technologies into foreign language teaching enhances the effectiveness of educational activities by intensifying the learning process, boosting students' motivation for cognitive activities, and engaging even passive learners. Furthermore, the researcher emphasizes that the use of AI fosters greater visual appeal and stimulates abstract and logical thinking. At the same time, the issue of safety and potential risks associated with the use of this technology remains relevant. According to the scholar, only by considering all possible threats can the implementation of AI in the educational environment ensure true effectiveness in the process of learning foreign languages (Zubenko, 2023).

T. Kosova focuses on the feasibility of integrating AI, particularly the GPT chatbot, into the process of teaching English through interactive methods. She also underscores the importance of personalizing approaches to teaching based on the individual needs of each learner. However, the researcher notes that the introduction of such technologies comes with several drawbacks that require critical consideration (Kosova, 2023).

N. Akopyants, based on the results of empirical research, which includes an analysis of the advantages, disadvantages, and opportunities of using AI in English language learning, concluded that the use of such technologies contributes to enhancing the effectiveness of the educational process and improving overall academic performance (Akopyants, 2023).

I. Kachur, in her scholarly studies, defines artificial intelligence as a revolutionary tool capable of transforming the modern educational landscape. According to researcher, the application of AI makes education more accessible, high-quality, and motivating, while also helping optimize the professional activities of educators. However, I. Kachur emphasizes that AI

cannot fully replace live interpersonal communication, which remains essential in the process of learning a foreign language (Kachur, 2023).

The above allows us to state the relevance and importance of the chosen research topic, as artificial intelligence is widely used in all areas of human life today, including the pedagogical process. However, the advantages and opportunities of using ChatGPT, as one of the AI products, in the process of learning Maritime English, have not yet been the subject of a separate, comprehensive scientific study.

The purpose of this article is to examine ChatGPT as an innovative tool for learning Maritime English, to identify and explore the advantages and possibilities of this technology, to outline its limitations, and to provide recommendations for its use in language learning.

The chatbot is an interesting tool that can be integrated into foreign language classes for higher education students. This program, based on machine learning technology, can simulate a real conversation with users and be used as an assistant for lessons for various audiences. One of the popular AI systems is ChatGPT, developed by the OpenAI laboratory (Burlak, 2024).

This technology represents an advancement over the automated speech recognition, natural language processing, and basic AI found in digital assistants like Siri and Alexa, which are primarily used to carry out simple automated functions. While assistants such as Siri and Alexa rely on machine learning to deliver information and perform tasks on command, like playing music or providing weather updates, ChatGPT is specifically built to conduct interactive, two-way conversations with users.

ChatGPT is a basic model used for context-based text generation. It uses the Transformer architecture, which allows the model to understand the context and generate responses that match the user's input. ChatGPT is a tool that can quickly respond to any request. By assessing student work and delivering detailed feedback, it has the potential to save hours of instructional time. Artificial intelligence tools have the potential to provide immediate feedback, which improves language learning outcomes. Chatbots engage students in language interaction, providing the opportunity to receive instant feedback. Teachers can prepare for classes faster because ChatGPT can create presentations, develop tests, discussion questions, and create vocabulary for the relevant topic.

The interaction between users and ChatGPT differs significantly from previous experiences with conventional software. Traditional natural language processing systems were typically limited to brief exchanges and fixed responses. ChatGPT, by contrast, is capable of generating original content and sustaining much longer conversations.

It is important to note that ChatGPT does not think like a human. It makes predictions based on learned patterns and responds through reasoned assumptions and predictions of likely or contextually appropriate word sequences. Nonetheless, legitimate concerns remain regarding the potential risks and responsibilities associated with such technologies (Tryhub, 2024, p. 77-78).

The application of AI, particularly Chat GPT – a sophisticated natural language processing model – within the educational domain presents several significant implications:

1. **Enhancement of learner motivation:** Chat GPT has the potential to positively influence students' motivation to learn by fostering increased engagement, self-efficacy, and a more favorable attitude toward the learning process. Its capacity to deliver interactive and individualized support contributes to a more stimulating and learner-centered environment.

2. **Development of reading and writing proficiency:** The integration of Chat GPT in educational settings has been shown to facilitate the improvement of students' literacy skills. Through the provision of immediate feedback and constructive suggestions, the tool supports learners in refining their writing and enhancing their reading comprehension.

3. **Assistance in English Language Acquisition:** In the context of second language learning, access to responsive and on-demand assistance is a critical factor. Chat GPT offers practical support by enabling instant translation, language practice, and conversational engagement, thereby

serving as a supplementary resource for English language learners.

4. Advancement of teaching methodologies: The use of Chat GPT can also contribute to the enhancement of pedagogical practices. Educators may employ the tool to provide differentiated instruction, clarify complex concepts, and promote interactive learning experiences. Such practices align with contemporary educational paradigms that emphasize learner autonomy and active participation (Kushmar, 2024, p. 46).

However, the widespread accessibility of ChatGPT has raised concerns within academic institutions, particularly regarding its use by students for completing homework and examinations. In response, some schools and universities have restricted or blocked access to the tool on institutional networks, citing potential academic integrity issues. Reports have surfaced of students using ChatGPT to generate entire assignments or exam responses, in some cases submitting the AI-generated content without any modifications. This practice has heightened concerns among educators about the ethical implications and the authenticity of student work (Kushmar, 2024, p. 47).

Furthermore, traditional plagiarism detection software often fails to identify content generated by ChatGPT, as such texts are not reproduced from existing sources but are instead algorithmically generated, thus avoiding direct plagiarism. The inability of standard detection tools to recognize AI-generated material presents a significant challenge to academic integrity frameworks, prompting the need for revised assessment strategies and updated academic policies.

This article examines the potential applications of the ChatGPT model in the context of Maritime English instruction and investigates how this technology can enhance the learning process. ChatGPT offers potential for improving Maritime English studying by assisting students in refining their speaking skills, listening comprehension, reading proficiency, vocabulary acquisition, and the accuracy of grammatical usage.

An illustrative application of GPT in the context of Maritime English learning is the English Conversation AI chatbot, or Talk to me. This tool facilitates English language learning through interactive communication with GPT. It enables users to pose questions, perform various tasks, and receive responses that are grammatically and orthographically accurate. The following examples demonstrate how this chatbot can be integrated into Maritime English lessons.

The parameters for interaction were established around the topic “Transportation of Dangerous Goods” in the following format: «Act as a real Master. I am your Chief Officer and I will ask you some questions about preparing for the transportation of pesticides» (Fig. 1).

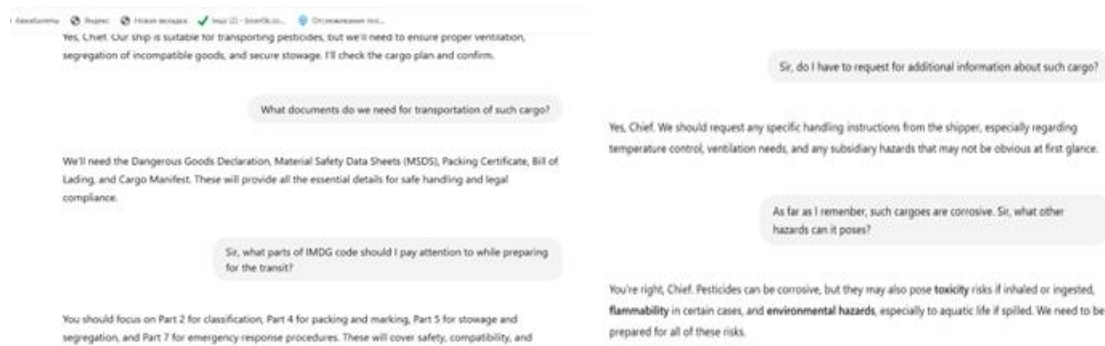


Figure 1 – Example of Task 1 using ChatGPT

Another example of a task is to complete the dialogue using the SMCP for the topic “Emergency Response Actions in Case of Fire”. The teacher should provide AI with the phrases that should be used in the dialogue and give the following instructions for communication: “Act as a real Port Service. Use the following SMCP ... Continue the dialogue

- Port Service. This is MV Korea. How do you hear me? Over.
- MV Korea. This is Port Service. Go ahead. Over.

- Port Service. I'm on fire in the hold in position three two degrees one five minutes north one two eight degrees two four minutes east. Over.

- Korea. Is the fire under control?

- Port Service. Fire is not under control... .. Answer only after my response" (Fig. 2).

- MV Korea. Understood. Take actions according to the Emergency Plan. Operate the general emergency alarm. Alarm the harbour fire brigade. Put on protective clothing and breathing apparatus. Over.

Port Service. Two crewmembers are injured. Over

MV Korea. Understood. Provide first aid immediately. Evacuate injured crewmembers to a safe area. Medical assistance is on the way. Over.

Port Service. Temperature in container with IMO class 4 goods is increasing.

MV Korea. Understood. Only open the container when smoking is stopped. Cool down the container with water. Fight the fire from a great distance. Over.

Figure 2 – Example of Task 2 using ChatGPT

ChatGPT, when used as a communicative simulator, produced responses that were comprehensive and demonstrated a high degree of lexical richness and grammatical accuracy. Beyond its capacity to create an effective artificial English-speaking environment, this form of communicative simulation also offers psychological comfort to learners. Recognizing that they are interacting with a language simulator, students feel less pressure and are more inclined to rehearse or repeat questions before speaking. Since the chatbot responds to coherent speech and interprets pauses as cues to begin its reply, learners are encouraged to speak fluently, with appropriate rhythm and accurate pronunciation to ensure successful interaction with the AI. Additionally, the gamified aspects of learning with ChatGPT, along with the ability to personalize conversations and select topics of interest, further motivate students to actively engage in developing their speaking skills.

As a result of our research, the use of ChatGPT in Maritime English teaching offers several notable benefits, including enhanced access to authentic language materials, more efficient development of oral communication skills, improved writing proficiency, enriched vocabulary and grammatical accuracy, and individualized learning.

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