

CHAT GPT: PERSONAL DIGITAL ASSISTANT IN FOREIGN LANGUAGE LEARNING

Nadezhda Slavova

Technical University of Gabrovo, 4, Hadji Dimitar, Str., 5300 Gabrovo, Bulgaria

** Corresponding author: snade_17@yahoo.com*

Abstract

This paper aims to highlight several key advantages of using Chat GPT as a personal digital assistant for foreign language learners. It views Chat GPT as a powerful AI tool that enhances learner-computer interaction and self-teaching. Examples taken directly from Chat GPT chat windows are provided to support the claims presented in the paper. The focus is solely on the context of foreign language learning, deliberately avoiding any commentary on whether Chat GPT is beneficial or detrimental in other areas.

Keywords: generative artificial intelligence, human intellect, computer-learner interaction, adaptive learning, self-teaching

INTRODUCTION

On November 30th, 2022 Open AI released the latest challenge to the creative human intellect Chat GPT and generative AI became easily accessible. Powered by machine learning and vast amounts of data, it interacts with users in an incredibly realistic way. In an era where digital technology continuously transforms education, artificial intelligence (AI) stands at the forefront of innovative teaching and learning methodologies. Among the myriad AI tools available, Chat GPT has emerged as a revolutionary personal digital assistant, particularly beneficial for foreign language learners.

EXPOSITION

To effectively address this topic, it is essential to identify the distinctive characteristics of the web-based Chatbot, Chat GPT. Chat GPT, which is tailored for the general public, unlike Open AI which provides its users with various generative AI models to test and employ, is limited mostly to back and forth communication. This particular AI tool uses large language models (LLMs) that can learn from huge data bases such as e-journals, tons of books, etc. “GPT stands for *Generative Pre-*

Trained Transformer, which refers to how Chat GPT processes requests and formulates responses. Chat GPT is trained with reinforcement learning through human feedback and reward models that rank the best responses. This feedback helps augment Chat GPT with machine learning to improve future responses.”[1]. It is this possibility for machine learning that enables Chat GPT to study lots of conversations using deep learning models in order to figure out how humans talk and consequently to deliver lifelike conversational experiences, to write essays, and to analyze data. This makes it invaluable for individuals who seek personalized virtual assistance in foreign language learning. Presented below are several examples demonstrating how Chat GPT can enhance various aspects of the foreign language learning process.

1. Vocabulary building: This AI tool gives definitions of new vocabulary and provides examples of how words are used in different contexts. By providing multiple contextual examples, Chat GPT can help learners understand how to use new words effectively in various situations. Example: “*Learner: What does “mitigate „mean? Chat GPT: Definition: To make less severe,*

serious, or painful. **Environmental Context** "Efforts to mitigate climate change include reducing carbon emissions and increasing renewable energy use." **Explanation:** In this context, "mitigate" means to reduce the severity of climate change. **Medical Context** "The new treatment can mitigate the symptoms of the disease, making patients more comfortable." **Explanation:** Here, "mitigate" refers to lessening the severity of disease symptoms. **Example Business Context** "The company implemented new policies to mitigate financial risks." **Explanation:** In a business context, "mitigate" means to reduce the potential financial risks. **Legal Context** "The lawyer argued that mitigating circumstances should be considered in the sentencing." **Explanation:** In legal terms, "mitigating" circumstances are those that might lessen the perceived severity of the offense. The same result can be achieved by looking words up in dictionaries and searching the Internet for examples. However, the 24/7 availability of Chat GPT and the accelerated rate at which answers are generated makes it a reliable ally in mastering and practicing vocabulary.

2. Assistance in translation: Chat GPT can be a valuable tool for translators in various ways, enhancing efficiency and accuracy. Example: "Learner/Translator: Which word is more appropriate **"wiring"** or **"cabling"** in the following title of a graduation thesis: "Wiring/Cabling of Low-Voltage Power Transmission Networks and Evaluation of Their Cost-Effectiveness" Chat GPT: In the context of "Wiring/Cabling of Low-Voltage Power Transmission Networks and Evaluation of Their Cost-Effectiveness," the word "cabling" is more appropriate. Here's why: Cabling: Refers specifically to the installation and management of cables used for transmitting power or data. In the context of power transmission networks, "cabling" implies the use of insulated conductors (cables) designed to carry electrical power. Wiring: A more general term that can refer to the installation of

both cables and wires, often used in the context of electrical systems within buildings or machinery. While it can be used for power transmission, it doesn't convey the same specificity as "cabling." So, the revised sentence should be: "Cabling of Low-Voltage Power Transmission Networks and Evaluation of Their Cost-Effectiveness."

3. Error correction and feedback: Chat GPT can correct mistakes in real time, offering explanations for errors and suggesting improvements. Example: "Learner: Is the following sentence correct: "Hardly has she ever was in greater need of a friend than now." Chat GPT: The sentence "Hardly has she ever was in greater need of a friend than now." is incorrect. It contains a grammatical error in the verb tense usage. Here's the corrected version: "Hardly has she ever been in greater need of a friend than now." Explanation: "Hardly" often triggers inversion, which means the auxiliary verb (has) comes before the subject (she). After "has," the main verb should be in the past participle form. In this case, the past participle of "to be" is "been." So, the corrected sentence is: "Hardly has she ever been in greater need of a friend than now."

4. Pronunciation tips: Chat GPT can provide immediate insight on language rules and pronunciation. Example: "Learner: Why does stress in the word "record" shift? Chat GPT: The stress shift in the word "record" depends on whether it is used as a noun or a verb, which is a common phenomenon in English for words that can function as both. Noun: When "record" is used as a noun, the stress is on the first syllable: ● RE-cord /'rekərd/ example: "I have a record of all the transactions." Verb: When "record" is used as a verb, the stress shifts to the second syllable: ● re-CORD /rɪ'kɔ:rd/ Example: "Please record the meeting." Reasons for the stress shift: • Phonological Patterns: English tends to have different stress patterns for nouns and verbs. This helps to distinguish between the two uses in spoken

language, providing clarity and aiding comprehension. • *Morphological Rules: In English, there is a tendency for many two-syllable words that can be both nouns and verbs to follow this stress pattern. This is a result of historical changes and the influence of stress patterns from other languages, such as French and Latin.* • *Functional Clarity: Stress shift can help listeners quickly identify the role of the word in a sentence, especially in contexts where the syntax might be ambiguous.* *Examples of Other Words with Stress Shift:* 1. Present: •Noun: PRE-sent /'prezənt/ ("The present is a gift.") •Verb: pre-SENT /pri'zent/ ("Please present your findings."); 2. Object: •Noun: OB-ject /'a:bdʒekt/ ("The object is on the table.") •Verb: ob-JECT /əb'dʒekt/ ("I object to this proposal."); 3. Convict: •Noun: CON-vict /'ka:nvɪkt/ ("The convict was sentenced.") •Verb: con-VICT /kən'vɪkt/ ("The jury will convict the suspect.").

5. Clarification of idiomatic expressions: Example: "Learner: What does **"chip off the old block"** mean?" Chat GPT: The idiom "chip off the old block" refers to someone who closely resembles their parents, either in appearance, behavior, or character traits. It is often used to highlight the similarities between a child and their parent, suggesting that the child has inherited specific qualities or characteristics from the parent. Example of usage: 1. Appearance: "Look at how he smiles—he's a real chip off the old block." 2. Behavior: "She has the same business acumen as her father. She's a chip off the old block." 3. Character traits: "He's got his mother's sense of humor—truly a chip off the old block." Origin: The phrase likely comes from the idea of a chip being a small piece broken off from a larger block of wood or stone, suggesting that the small piece (the child) is made of the same material as the larger piece (the parent), and thus shares the same property.

6. Bilingual explanation: One undeniable advantage of Chat GPT is its ability to understand and respond

simultaneously in both the learner's native language and the target language. Bilingual explanation can aid understanding, help clarify complex concepts and enhance comprehension for individuals who are in the process of learning a new language. In the example presented below, the learner's native language is Bulgarian. "Learner: какво се има предвид под **"implementation"** в следното заглавие: Design of Sensor Networks with Data Transmission Monitoring and Implementation Efficiency? Chat GPT: В заглавието "Design of Sensor Networks with Data Transmission Monitoring and Implementation Efficiency" терминът "implementation" се отнася до процеса на създаване и въвеждане в експлоатация на дадена система, в случая мрежа от. Това включва всички стъпки от планирането и проектирането до физическото изграждане, програмиране, тестване и пускане в експлоатация на мрежата. С други думи, **"implementation efficiency"** (ефективност на внедряването) се отнася до това колко добре и ефективно се осъществява внедряването на сензорната мрежа. Това може да включва фактори като време за изпълнение, разходи, използване на ресурси и цялостна производителност на мрежата след внедряването. Learner: А може ли да се използва думата **"deployment"** вместо "implementation"? Chat GPT: Да, думата "deployment" може да бъде използвана вместо "implementation" в контекста на заглавието, като означава процеса на разгръщане и пускане в експлоатация на мрежата от сензори. Заглавието би изглеждало така: "Design of Sensor Networks with Data Transmission Monitoring and Deployment Efficiency." Това ще подчертае, че фокусът е върху ефективността на процеса на разгръщане и внедряване на мрежата. Обаче, ако искате да подчертаете цялостната ефективност на внедряването, включваща както

разгръщането, така и последващата работа на системата, "implementation" остава по-подходящ термин.

On first impression, the question arises – what's the difference between this particular tool and Google or any other search engine? Both provide information based on a user's query. Chat GPT uses a diverse range of internet texts as its training data, while Google uses a vast index of web pages. Chat GPT takes a text input and generates a text response, while Google takes a query and returns tons of webpages. Chat GPT responds in a dialogue format with its users providing the core information sought by the learner, while Google is primarily a one-way tool that provides information. Google Search is nothing but a tool to find information on the web, while Chat GPT is an AI language model that can perform a variety of language related tasks and engage in conversations with users. The major difference between them is that Chat GPT generates results based on natural language input, such as a simple question or request, while Google Search Engine provides results based on key words. [2]

CONCLUSION

1. Chat GPT serves as a comprehensive resource for foreign language learners, offering personalized assistance and real time feedback. [4]

2. The interactive nature of Chat GPT increases learner engagement, making language learning more enjoyable and effective.

3. As a web-based tool, Chat GPT is easily accessible anytime and anywhere, providing continuous support outside the traditional classroom setting.

4. Encourages self-directed learning by allowing students to practise and improve their language skills independently in various aspects of the foreign language learning process.

5. The smart Chabot helps to create a new learning environment for foreign language learners that suits well their fast-paced lives.

Although using Chat GPT for completing assignments is more or less considered as cheating it still saves time and thus enhances productivity. In terms of productivity learners have completed the same work in less time and since learning involves thinking about things, Chat GPT can help them do that effectively by generating responses to a wide variety of questions and topics and as long as they consider and refine the output thoroughly and profoundly, they will only benefit from the interaction with this powerful AI tool.

REFERENCE

- [1] <https://www.hurix.com/chat-gpt-pros-and-cons-of-using-chatgpt-in-higher-education/>.
- [2] <https://www.ortmoragency.com/blog/chatgpt-vs-googlesearch>.
- [3] <https://www.cyient.com/blog/chatgpt-friend-or-foe>.
- [4] <https://www.dyndevic.com/en/news/chatbots-in-elearning-automating-student-support-and-feedback-ELN-2113/>