

Emerging Trends in Teaching English for Specific Purposes: A Case Study of ChatGPT

Monica Ariana SIM^a, Anamaria Mirabela POP^{* b}

^a*Department of International Business, Faculty of Economic Sciences, University of Oradea, Oradea, Romania*

^b*Department of International Business, Faculty of Economic Sciences, University of Oradea, Oradea, Romania*

mipop@uoradea.ro

ariana_mona@yahoo.com

amasturza@yahoo.com

veronicaabrudan@yahoo.com

Abstract: This paper examines the transformative impact of Artificial Intelligence (AI) on the field of English for Specific Purposes (ESP), with a particular emphasis on Business English. The study is constructed around whether AI will redefine teaching methodologies and enhance the effectiveness of ESP instruction. Focusing on a Business English course at the Faculty of Economic Sciences, University of Oradea, the study compares the effectiveness of AI-powered tools with traditional teaching methods. The paper explores both the benefits and challenges of incorporating AI technologies, highlighting ChatGPT as a key innovation in the ESP teaching process. It discusses the advantages of using AI, while also addressing potential obstacles, such as accessibility concerns, the need for AI systems to accurately interpret specialized terminology, and the reliance on technology, which may impact conventional teaching approaches. Additionally, the paper presents practical examples of AI-generated exercises tailored to Business English, showcasing the ability of AI to provide true-to-life adapted situations that enhance the learning experience. Finally, the paper tries to offer insights into future trends in language education and the evolving role of AI in shaping the landscape of ESP, particularly in Business English.

Keywords: AI; ESP; teaching; ChatGPT; advantages; challenges.

JEL Classification: F12; J11

1. Introduction

Dictionaries and specialists define artificial intelligence (AI) as the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings (Britannica), a term that refers indistinctly to systems that are pure science fiction (so-called "strong" AIs with a self-aware form) and systems that are already operational and capable of performing very complex tasks (face or voice recognition, vehicle driving - these systems are described as "weak" or "moderate" AIs) (Manning, 2020). The beginnings of AI date back to the mid-20th century; more precisely, in 1955, the term Artificial Intelligence (AI) was coined by John McCarthy, a Stanford professor who defined it as the science and engineering of making intelligent machines (McCarthy, 1956). This term is often used to describe the challenge of creating systems that possess human-like intellectual capabilities. These include the capacity for reasoning, interpreting and finding meaning, generalising across different contexts, and learning and adapting from previous experiences. Very fast, artificial intelligence, a concept that once belonged purely to science fiction, has evolved dramatically to become a critical element in various sectors, including

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education, marked by pioneering work in computer science and cognitive psychology. AI's initial educational incursion was modest, focusing on automating administrative tasks and providing rudimentary educational software. However, as AI technology advanced, its potential to enhance educational experiences became obvious. The introduction of AI into language learning proved to offer significant opportunities. It provided new and updated methodologies for teaching and learning languages, with a crucial impact on English for Specific Purposes (ESP) (ARNÓ-MACIÀ, E., 2012). This specialised part of language education answered specific needs especially valued by the business array looking for highly trained specialists; thus, AI proved to be a powerful ally to meet such unique demands.

Integrating AI into language education marked a turning point, laying the groundwork for more sophisticated applications, such as adaptive learning and intelligent tutoring systems. These systems could cater to individual learner needs, a feature immensely beneficial for the nuanced requirements of ESP. As AI continued to evolve, its role in language education exploded, giving way to revolutionary tools like ChatGPT, which would revolutionise ESP teaching.

2. Literature review

Learning foreign languages for specific purposes has always aroused interest as it is essential to teaching foreign languages. AI started as a tool meant to stimulate and automate human thought (Turing, 1950) and has evolved to play a significant role in education today, encompassing a wide range of applications from recommending Open Educational Resources (OER) content, detecting student emotions, and providing intelligent tutoring systems, to powering teaching assistants, as well as automating exam grading and assessment (Flores-Vivar & García-Peñalvo, 2023; Bahari, 2021). A brief look at the literature focusing on the influence of AI on teaching English for Specific Purposes (ESP) offered valuable insights into technologies and instruments that reshape ESP teaching, providing case studies and theoretical frameworks (Pokrivčáková, 2019). Papers highlight the importance of AI in catering to the specific needs of learners in different professional and academic fields; they provide fundamental knowledge on how AI is applied in language learning, including ESP (Poth, 2023; Kamalov et al., 2023; Buzarna-Tihenea, 2019). Research studies present empirical findings on the effectiveness of adaptive learning systems in ESP education (Pedró, Subosa, Valverde, 2019). Other research (Dodigovic, 2007; Golonka et al., 2014) argues that language learning tools make no difference in traditional classes, especially for beginners. The dilemma of whether AI tools for learning languages can replace the educator is given some answers, i.e. these new models can be used along with traditional methods, and they cannot replace educators; they are aids to the learning process, practical, but aids. (Følstad & Brandtzaeg, 2020). Another direction follows the challenges, ethical principles, or equitable chances to access AI resources, and it equally concerns governing bodies, as shown on the Council of Europe portal, World Economic Forum site or the UNESCO webpage and specialists (Reiss, 2021; Akgun, Greenhow, 2022; Lawton, 2023,) or bloggers (Marr, 2021). Research on AI literacy has not yet been published extensively in educational journals. Nevertheless, there are articles regarding the concerns about the lack of preparation of educators for the new technologies and the need for AI literacy in education to face the ever-growing needs of students for effective and engaging pedagogy and to provide more inclusive learning environments (Shulman, 2024).

3. What are AI language learning tools and applications?

AI language learning tools and applications are digital platforms that utilise AI technology to facilitate the learning and mastery of new languages. These applications range from systems capable of instant translation of text or speech to personalised language tutoring

programs that offer customised lessons and feedback and even language-generating technologies that can produce new text in a specified language. Robotics, chatbots, text data processing (TDM), massive data, and pattern recognition are samples of machine learning tools among AI (Dewi et al., 2021).

Some key features and applications of AI in language learning are personalised learning experiences where AI systems analyse learners' progress, strengths, and weaknesses to customise lessons and practice exercises; speech recognition and pronunciation correction relying on advanced technology as AI language learning apps can listen to users' pronunciation, compare it against the correct pronunciation, and provide immediate corrective feedback. This feature helps learners to improve their spoken language skills accurately; real-time translation and subtitling for both text and speech, offering users the ability to understand and communicate in foreign languages more effectively; chatbots and conversational agents that simulate natural language conversations, allowing learners to practice speaking and comprehension dynamically and interactively; content generation, tools that can create new text in the target language, providing learners with materials for reading and comprehension practice.

Diverse tools and applications based on AI flood the market, each distinguished by its unique functionalities and capabilities. Examples of AI language learning tools are *Duolingo*, offering gamified language learning lessons across numerous languages, adapting to users' learning speed and providing personalised feedback; *Elsa Speak*, focusing on improving English pronunciation through speech recognition and personalised feedback; *Google Translate*, widely used for instant translation purposes; *Babbel* which delivers conversational language learning with AI-driven review sessions to reinforce learning. These tools are transformational for the language learning experience, making it more accessible, efficient, and personalised to individual learning styles, enhancing the overall learning experience.

3.1. ChatGPT

ChatGPT occupies a special place in the above-mentioned panoply as it is considered a language learning tool only to some extent: even if the artificial intelligence model developed by OpenAI has not been specifically designed solely for language learning, it can certainly aid in language acquisition and practice in several ways. It allows learners to practice conversations, receive prompt feedback, and polish their language in use subtly. It is an ever-improving AI model; hence, the reference to it should be critical as it may not always provide accurate or contextual answers. It was designed to generate human-like text responses based on the input it receives. ChatGPT can engage in text-based conversations on various topics, answer questions, provide explanations, offer suggestions, and even tell stories.

As defined by its creators, ChatGPT is a sibling model to InstructGPT, which is trained to follow an instruction in a prompt and provide a detailed response (OpenAI, 2024). When asked itself, it provides the following answer: "hatGPT is a language model developed by OpenAI. It is based on the GPT-3.5 architecture, which is an advanced version of the GPT-3 model. ChatGPT is designed for natural language understanding and generation, making it capable of engaging in conversations with users, answering questions, providing information, and generating text in a human-like manner. (OpenAI, 2024) Edwige Simon rightly noticed that there had been language models before; nevertheless, none of them came close to being as good at generating human-like conversations and processing large amounts of information in mere seconds. (Simon, 2023) On the other hand, there are ethical threats or potential risks associated with using this app, such as academic ethics and honesty or data protection, but it is important to focus and explore the aspects where ChatGPT becomes valuable and improves the language learning process.

3.1.1. Ways in which ChatGPT can assist language learning

In point of the skills and language mastery a learner must acquire, ChatGPT seems to cover all:

- *speaking and listening* - new voice and image capabilities were integrated with ChatGPT, allowing learners to have a voice conversation integrating voice control plugins for more realistic, interactive experiences; voice control plugins allow users to dictate their questions and receive ChatGPT responses audibly (Simon, 2023);
- *reading* – the app may generate texts on the topics that interest the reader, and extensive exposure to the language is crucial; the tool may be asked to create: - Write 10 fun facts about Amsterdam – or – Can you tell me about Robert the Bruce? – Among the benefits we mention are the text's complexity and the diversity of styles and genres that can be controlled.
- *writing* – learners can write and receive instant feedback on their writing, be it grammatical errors, suggestions for alternative phrasing, etc. Moreover, ChatGPT can be asked to provide prompts for practising different types of writing: letters, business letters, memos, emails, or text messages, enabling learners to explore various formats and registers.
- *conversational practice* - users can engage in text-based conversations with ChatGPT in the language they are learning, allowing for practice in grammar, vocabulary, and comprehension;
- *grammar practice* - ChatGPT has been trained on vast amounts of data, including various languages, and it can generate texts using certain tenses or grammar structures reinforcing understanding of grammatical concepts;
- *translation and explanation* - although not its primary function, ChatGPT can help with translating phrases and words from one language to another and explain language concepts or grammar rules;
- *vocabulary learning* – ChatGPT can create word lists for specific categories (idioms, phrasal verbs, adjectives), be asked to generate exercises for specific vocabulary, or rephrase sentences or replace certain words with synonyms.

While ChatGPT offers many advantages for language learners, it is most effective when combined with other language learning methods and tools, especially for tasks requiring precise feedback on pronunciation or more structured language learning progression.

3.1.2 Advantages and disadvantages of CHATGPT as a language learning tool for acquiring business English

Introducing AI in teaching English for Specific Purposes offers both advantages and disadvantages, and we will briefly discuss them.

3.1.2.1 Advantages The integration of ChatGPT in foreign language learning affords numerous benefits, marking a paradigm shift in the pedagogical landscape. Furthermore, employing ChatGPT to teach business English offers multifaceted advantages, serving as a catalyst for enhanced learning outcomes and proficiency in professional communication within corporate settings.

ChatGPT furnishes learners with an *interactive platform*, a dynamic environment to practice their language skills; for business use, it provides learners with a simulated business environment where they can engage in authentic, real-world interactions. Set in business contexts, learners gain exposure to industry-specific terminology, negotiation tactics, and formal correspondence. Thus, their communicative performance becomes even more efficient.

ChatGPT offers *personalised learning experiences* tailored to the individual's proficiency level and learning pace, optimising the efficacy of language acquisition and fostering a more customised understanding of linguistic concepts; the remarkable benefit is that ChatGPT adapts its interactions to learners' areas of weakness refining their language abilities and aiding at overcoming linguistic barriers of business contexts.

Using ChatGPT in language instruction enlarges *access to authentic language* usage and cultural insights by exposing learners to an extensive lexicon, idiomatic expressions, and cultural details specific to native-speaker discourse. Moreover, integrating ChatGPT into business English instruction augments access to diverse business-related resources and materials exposing learners to authentic business communication scenarios (i.e. meetings, presentations, and negotiations) equipping learners with the requisite linguistic and cultural competencies essential for success in today's globalised business landscape.

3.1.2.2. Disadvantages While integrating ChatGPT into foreign language learning offers several benefits, it also faces learners and educators with notable, yet worth considering, disadvantages.

Relying excessively on ChatGPT may result in dependence on time consumed on devices and also on artificial activities, while learners may become familiar with interacting with a machine rather than engaging in authentic dialogue with native speakers or other learners. Referring to business language, ChatGPT can initiate business conversations, but its responses may lack the contextual understanding (often requiring precision, formality, and following cultural norms) necessary for effective professional communication.

Over-reliance on artificial intelligence in language learning contexts (also referring to language for specific purposes) poses a significant concern regarding the potential alteration of essential human interaction, which is crucial in the multifaceted language acquisition process. Beyond acquiring linguistic proficiency, language learning involves assimilating socio-cultural aspects and communicative dynamics specific to human interaction. While AI-driven platforms such as ChatGPT offer interactive learning experiences, they often fail to simulate the complexities of genuine human interaction. Language learning involves linguistic skills and social and cultural aspects that AI still struggles to address.

In addition to concerns surrounding diminished human interaction, integrating AI technologies in language learning is accompanied by considerable initial costs and implementation challenges for educational institutions. Moreover, the successful implementation of AI-driven language learning initiatives requires comprehensive training programs for educators to utilise these tools in pedagogical practice effectively.

Business English raises concerns regarding data privacy and confidentiality, particularly when discussing sensitive business topics, as there is a risk of inadvertent disclosure of confidential business information or trade secrets. Reliance on platforms for language instruction may expose businesses to cybersecurity vulnerabilities and data breaches, creating significant risks to organisational security and reputation.

To summarise, while AI offers numerous benefits in teaching ESP, it is essential to strike a balance and carefully address the potential disadvantages. The effective integration of AI should complement, rather than replace, human interaction and pedagogical expertise.

4. How to integrate ChatGPT in teaching business English

Within the realm of language learning for specialised purposes, various applications of ChatGPT have been identified. Here are some examples of its practical utility.

- *Generating language learning materials:*

Language learning materials are instantly created by ChatGPT, encompassing customized resources such as word lists, flashcards, quizzes, and exercises. These materials are designed to accommodate the individual needs of each and every learner, thus enhancing the efficacy of the learning process. As an educator catering to Romanian university students specializing in economics and business English, there are numerous and diverse challenges. Using speaking drills becomes imperative in such a scenario. Leveraging the word lists, customized materials can be tailored to meet the needs of the students precisely (Fig.1).

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ChatGPT 3.5 ▾



You

Please generate a list of 10 difficult-to-pronounce management words for Romanian learners



ChatGPT

Certainly! Here are 10 management-related words that Romanian learners might find difficult to pronounce:

1. Leadership - Conducere
2. Entrepreneurship - Antreprenoriat
3. Strategic planning - Planificare strategică
4. Organizational culture - Cultură organizațională
5. Stakeholder engagement - Implicare a părților interesate
6. Performance management - Managementul performanței
7. Change management - Managementul schimbării

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Fig.1 Generating language learning materials

Source: OpenAI. (2024). *ChatGPT* (4) [Large language model]. <https://chat.openai.com>

- *Virtual Language Tutoring:* Language learning platforms have integrated ChatGPT, offering virtual tutors that allow practice in speaking and listening within a supportive environment; i.e. ChatGPT was asked: *Give me something similar but the focus is now on learning new management vocabulary in English for Romanian students.* When instructing third-year students in business communication, incorporating challenging and diverse instructional materials proves to be exceedingly beneficial. Language Assessment: ChatGPT analyzes learners' writing and speech to assess their language proficiency accurately and efficiently. Here are some steps to follow when integrating this tool into the workflow to receive instant checks and feedback on writing: 1. Accessing ChatGPT for automated use by developing customized cases and automated feedback; 2. Preparing a writing assignment specifying the aspects of writing we focus on, such as grammar, vocabulary, coherence, or style, thus getting instant feedback from ChatGPT; 3. Using

ChatGPT for instant checks, enabling learners to input their writing directly into ChatGPT – then prompting correctly (For example, "Please check this essay for grammatical errors and suggest improvements," or "Provide feedback on the coherence and flow of this report."), ChatGPT will check accordingly; 4. Interpret feedback when ChatGPT provides corrections, suggestions, and sometimes explanations that should be reviewed to understand the changes recommended.

▪ *Language Translation:* companies utilize ChatGPT for text translation between languages, facilitating comprehension and supporting language acquisition. Thus, business students can leverage ChatGPT for text translation and language learning in various strategic ways to enhance their comprehension and prepare for the global labor market: 1. Enhancing business vocabulary by means of vocabulary expansion, translating key business terminology and phrases into multiple languages; 2. Understanding international business documents when students use ChatGPT to translate and analyze business documents, reports, and case studies from various languages helps them understand the nuances of business practices in different countries. These examples represent just the top of the iceberg of ChatGPT's potential in language learning as technology evolves and innovative applications are expected to emerge.

5. Conclusions

In conclusion, while AI offers numerous benefits in teaching ESP, it is nevertheless essential to keep a balance as the integration of AI should complement, rather than replace, human interaction and pedagogical expertise. This approach ensures a holistic and adaptive language learning experience for learners in specific professional contexts. Humans learn by observing and interacting with other humans. Yet, there is no doubt that AI has a way of supplying the necessary level of emotional support and personal interaction to build proper relationships or to make decisions in their classrooms.

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