

Embracing the Wave: The Disruption of Conversational Artificial Intelligence toward English for Specific Purposes (ESP) Teaching Transformation

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ABSTRACT

ChatGPT, a state-of-the-art artificial intelligence (AI) chatbot which is intended to have natural, intuitive human-to-human conversations by employing cutting-edge machine learning algorithms to produce responses to text input that resemble those of a human, is altering the teaching process especially in English for specific purposes (ESP). It engages learners on multiple cognitive levels, reinforcing comprehension and retention of ESP concepts. However, as we embark on this transformative journey, the potential displacement of human educators is needed to be concerned since AI is able to take over the teacher roles. This paper provides a comprehensive exploration about the benefits and challenges from the disruption of ChatGPT toward teachers' teaching practice, especially for teachers who deliver English material for certain professional purposes. The study employs library research method design to identify sources that offer accurate data or professional judgment regarding a research question; eventually, these sources are a prerequisite for all other research techniques. The research has clearly described not the benefits of involving ChatGPT in teaching and learning transformation but also the advantages to enhance teachers' abilities in delivering ESP content. However, there are some disruptions which become a big challenge in this paper which needs to be concerned by teachers and students. Overall, the challenges of ChatGPT involvement in teaching ESP emphasized that even though ChatGPT is sophisticated enough to facilitate learning and teaching environment, teachers' role is still irreplaceable.

Keywords: ChatGPT, English for Specific Purpose, Teaching Disruption and Transformation

A. INTRODUCTION

In an age where technological progress is reshaping every facet of our lives, education stands as an arena poised for transformation. Within this dynamic landscape, the realm of English for Specific Purposes (ESP) teaching is undergoing a profound evolution, driven by the advent of Artificial Intelligence (Tang, 2023). Some discussions have demonstrated the seismic impact of AI on ESP teaching strategies, unraveling the manifold benefits and nuanced challenges that accompany this disruptive technological wave (Baidoo-Anu & Ansah, 2023; Ibrahim & Ibrahim, 2023; Peres et al., 2023).

ESP teaching, which was formerly distinguished by specially designed training for particular professional fields (Johns, 2012), is currently at the center of innovation, with AI-driven solutions changing the way that education is delivered. AI has become a catalyst for improving the learning process because of its extraordinary capacity to assess, modify, and personalize education (Paek & Kim, 2021). Moreover, conversational AI plays a dominant role in ESP vocabulary learning nowadays (Qasem et al., 2023).

This paradigm shift is underscored by AI's unparalleled capacity to offer individualized learning pathways, for instance *ChatGPT*. It is a state-of-the-art artificial intelligence (AI) chatbot which is intended to have natural, intuitive human-to-human conversations by employing cutting-edge machine learning algorithms to produce responses to text input that resemble those of a human. Having undergone multiple updates and enhancements over the course of several years of development, *ChatGPT* is among the most sophisticated chatbots on the market right now (Rochford, 2022). By leveraging sophisticated algorithms, it intuitively can gauge learners' proficiency levels, preferences, and unique language requisites (Bin-Hady et al., 2023). The result is a pedagogical experience tailored to the singular needs of each student, amplifying the efficacy and efficiency of language acquisition.

However, *ChatGPT's* effects go beyond simple personalization. It radically reinterprets the feedback loop, an essential component of language learning. It has always been extremely difficult to evaluate linguistic competency in a timely and thorough manner. Natural Language Processing (NLP) allows artificial intelligence (AI) to overcome these constraints. It can evaluate spoken and written language instantly, giving precise feedback on syntax, grammar, and pronunciation. By enabling students to remedy mistakes as they happen, this real-time corrective mechanism shortens the learning curve (Fang et al., 2023).

Furthermore, the integration of *ChatGPT* expands the reservoir of educational resources available to ESP learners (Shidiq, 2023). Machine learning algorithms curate extensive repositories of domain-specific materials, ranging from scholarly articles to immersive multimedia content. This treasure trove of resources immerses learners in authentic, contextually relevant material, catapulting their language acquisition into a new dimension (Ausat et al., 2023).

Since AI-driven ESP education, it engages learners on multiple cognitive levels, reinforcing comprehension and retention of ESP concepts. It empowers learners to navigate their professional spheres with confidence and precision independently in learning English. It is enhancing communication competence, self-management competence, and information processing competence through the creation of AI-based lessons, especially for Gen-Z learners (Chang, 2023). However, as we embark on this transformative journey, the potential displacement of human educators is needed to be concerned since AI is able to take over the teacher roles.

In the subsequent parts of this article, I delve deeper into the benefits and challenges. Through a synthesis of existing literature and analysis of empirical examples, I aim to address

the advantages and disruption of *ChatGPT* toward teachers' teaching practice, especially for teachers who deliver English material for certain professional purposes.

B. REVIEW OF RELATED LITERATURE

In November 2022 launch of ChatGPT, an OpenAI chatbot, created a plethora of opportunities for the use of artificial intelligence (AI) in textual material creation and processing, including the use of AI in teaching and learning foreign languages at all educational and age levels. It can be used as an efficient and time-saving tool for many aspects of the planning and execution of teaching units and the assessment of students' written assignments when it comes to the teaching of English for Specific Purposes (Kovačević, 2023). Moreover, Jia et al. (2022) explored that Artificial Intelligence is getting specified into English Language Learning (AIELL) which supports learning on students' learning motivations, vocabulary, and grammatical skills in English in real-world and ubiquitous learning situations. From the educator's perspective, Sumakul et al (2022) demonstrated a study which looked into how educators felt about using AI in EFL classes. Interviews with four EFL professors at an Indonesian university who have expertise incorporating AI into their lesson plans were used to gather the data. The findings indicate that every teacher's opinion of using AI in the classroom was favorable. Teachers concurred that AI could support their instruction and aid pupils in learning. Furthermore, the data from the interviews suggests that when incorporating AI into EFL classrooms, teachers' technological and pedagogical ability as well as students' motivational levels should be taken into account.

Students' Learning Perception through ChatGPT

In another finding, Shoufan (2023) demonstrated how much the students value ChatGPT's features and how engaging, inspiring, and practical it is for their academic and professional endeavors. They love its human-like interface, which offers well-structured responses and clear explanations, and find it straightforward to use. Though ChatGPT does not replace human intelligence, many students feel that its responses are not always accurate, and the majority of them think that it needs solid previous knowledge to function. Therefore, while the majority of students believe that it has to be enhanced, they are hopeful that this will happen soon. Students have differing opinions about ChatGPT's detrimental effects on education, academic integrity, employment, and general well-being. We conclude that learning can and ought to be facilitated by it. Students ought to understand its limitations, though. Teachers ought to give ChatGPT a go and mentor students in efficient prompting methods and answer evaluation. The creators ought to refine their models in order to increase the precision of the responses provided. Future

research and development will be informed by the study, which sheds light on ChatGPT's educational potential as well as its limits. Furthermore, it can support mobile assisted language learning (MALL) by utilizing ChatGPT through mobile devices to enable the teacher in designing a customized language learning environment (Rong & Wang, 2021). In addition, the students can acquire many methods of learning promotion and assistance, anytime, anywhere learning support, and, in the end, increases students' learning happiness and engagement.

The Challenges for Educational Environment by the Existence of ChatGPT in Higher Education

The world has changed dramatically in the last few decades, and it continues to change. Chat GPT has created tremendous speculation among stakeholders in academia, not the least of whom are researchers and teaching staff (Biswas, 2023). The essence of education highlighted the value of developing students' competence in higher education and the necessity for them to pick up higher-order thinking abilities (such problem-solving or critical thinking) (Fuchs, 2022). The system may have trouble comprehending the subtleties and complexity of human language, which could result in misinterpretations and inaccurate answers.

The risk of becoming overly dependent on technology, which could impede the development of critical thinking abilities, is another major obstacle that students may encounter when using NLP models in higher education. Although critical thinking has been highlighted as an example skill, there are many other higher-order thinking abilities that could be further explored in the context of chatbots. Although these models can provide individualized learning experiences and helpful support, students must be careful not to rely too much on the system at the price of honing their own critical and analytical thinking abilities.

Moreover, Wilkenfeld et al., (2022) stated some challenges for teaching practices while using ChatGPT since chatbots have linguistic limitations. In general, it can offer responses that are grammatically correct. Nevertheless, linguistic variety and pragmatic adaptability are currently lacking in chatbot (Chaves et al., 2022). In some instances, chatbots can gradually converge with people's linguistic styles. However, the creation of models for natural language processing and artificial intelligence, such as Chat GPT, is only getting started.

1. ChatGPT is more Powerful than Teachers in ESP

a. Learner-Centered Instruction: ChatGPT Fulfills Diverse Needs

ESP's learner-centered philosophy underscores the heterogeneous nature of learners' goals and language proficiency levels. Munby (1981) advocates for an approach where learners actively participate in shaping the instructional content and strategies. By acknowledging

learners as unique individuals with distinct communication purposes, ESP aligns itself with contemporary pedagogical trends that emphasize personalized learning experiences (Brown, 2016). This recognition of learners' heterogeneity ensures that instruction is neither monolithic nor detached from the intricacies of their communicative objectives.

In this role, ChatGPT is able to personalize students' needs (Kovačević, 2023) especially in English for Specific Purpose (ESP) context. It is suitable with the nature of a pupil's goals to reach an appropriate language proficiency level. (Bin-Hady et al., 2023).

b. Authentic Materials: Chat GPT is Bridging the Gap to Real-World Language Use

Swales & Swales (1990) elucidated the significance of incorporating authentic materials in ESP instruction. They argued that the use of genuine documents, reports, and interactions from learners' intended fields is crucial in exposing them to the intricacies of domain-specific language use. Authentic materials transcend the confines of controlled classroom exercises, immersing learners in the contextual nuances and linguistic registers of real-world communication (Benavent & Peñamaría, 2011). In addition to improving language skills, this exposure develops learners' comprehension and production of discourse that is appropriate for the given environment.

Based on the thesis of Zulfa (2023), ChatGPT could facilitate learners to create real-world language use. It is clearly described in her thesis that it provided authentic material for different students' needs in an English learning context.

c. Integration of Discourse and Vocabulary with ChatGPT

ESP instruction transcends the mere teaching of vocabulary and grammar rules. It delves into the discourse patterns, conventions, and communicative strategies prevalent in specialized fields (Chen, 2016). Johns (2012) emphasizes the integration of discourse analysis into ESP pedagogy, arguing that learners need to understand not only the building blocks of language but also how these blocks are structured to create coherent and persuasive communication. This integration ensures that learners possess the necessary tools to navigate intricate communicative situations.

Based on Wu et al (2023), Chat GPT plays a role in Grammar Error Correction (GEC) and provides fluent vocabulary based on students' proficiency needs. However, it is not better than the commercial *Grammarly*. By looking at the outputs, ChatGPT has the unusual capacity to modify surface expressions and sentence structure while preserving grammatical accuracy, going beyond one-by-one corrections. This conclusion is supported by the findings of the human evaluation, which show that ChatGPT causes more overcorrections than under- or mis

corrections. These findings highlight the drawbacks of evaluating GEC model performance by using automatic evaluation criteria and imply that ChatGPT may prove to be a useful tool for GEC.

In this expanded literature review, I have delved deeper into challenges for teachers in the future because of the disruption of ChatGPT in English teaching practice, especially for English in specific contexts. It is reasonable since it could replace the technical teaching strategy of a natural teacher in providing learning material, contextual language learning needs, accessibility, and so on.

C. METHODS

In order to apply the library research method in this study, sources that provide factual information or an expert's or personal opinion on a research subject were located; this is a fundamental step in every other research strategy (George, 2019). This research adopts a literature review approach to comprehensively explore and synthesize existing research on ChatGPT in English teaching for specific purposes. A systematic search of scholarly databases, academic journals, and relevant texts was conducted to gather a diverse range of sources that contribute to the understanding of ESP principles, methodologies, benefits, and implications (Kothari, 2004) and the disruption of ChatGPT on ESP principles (Rochford, 2022). Sources for this literature review were selected based on their relevance, rigor, and contribution to the field of ESP integrated with Artificial Intelligence and its challenges. Peer-reviewed articles, books, conference proceedings, and reputable reports were considered. Emphasis was placed on including a variety of perspectives, theoretical frameworks, and empirical studies to provide a well-rounded view of the topic.

The data collection process involved accessing and critically evaluating selected sources. Key themes, concepts, and findings related to ESP and Teaching practice by using Artificial Intelligence were identified through iterative reading, note-taking, and categorization. The analysis of sources focused on identifying patterns, trends, and scholarly debates within the literature. The synthesized findings from the reviewed literature are discussed concerning ESP's principles, methodologies, benefits, and implications. The discussion critically examines the consensus, discrepancies, and evolving perspectives within the literature. It also aims to identify gaps in current research and areas that warrant further exploration.

D. RESULTS

In this findings, benefits and challenges will be explained clearly by relating with various and recent literature;

Benefits	Challenges
<p>ESP refers to the use of English in specific contexts, such as business, medicine, law, aviation, and others, where the language requirements are specialized.</p> <p>Here are some potential findings and applications related to the use of ChatGPT in ESP:</p> <ol style="list-style-type: none"> 1. Domain-Specific Assistance <p>In specialized industries, ChatGPT can be trained or adjusted to offer more accurate and contextually appropriate responses by using domain-specific language and expertise. For example, a ChatGPT model might be customized to help with technical support, medical diagnosis, or legal advice (Su & Yang, 2023).</p> 2. Language Learning and Teaching: <p>ChatGPT is a useful tool for language learners in particular domains. It can offer immediate response, clarifications, and illustrations pertaining to certain vocabulary and ideas. It can play a valuable role in Language Learning and Teaching,</p> 	<p>To begin with, there are several challenges that teachers face in teaching English for Specific Purposes (ESP) compared to using ChatGPT or similar language models. Here are some findings based on that timeframe:</p> <p><i>Challenges Faced by Teachers in Teaching ESP:</i></p> <ol style="list-style-type: none"> 1. Specialized Content Knowledge: ESP teachers often need a deep understanding of the specific field in order to effectively teach the language in context. This requires expertise in the terminology, concepts, and practices of the targeted industry or profession (Iswati & Triastuti, 2021). 2. Resource Availability: Finding and creating relevant and up-to-date teaching materials for specific fields can be challenging. ESP teachers may need to invest significant time in

<p>especially in the context of English for Specific Purposes (ESP). ESP focuses on teaching English in specialized fields like business, medicine, law, engineering, and others (Kohnke et al., 2023). Additionally, it can create practice questions and tests according to the domain that the student has selected.</p> <p>3. Technical Documentation and Writing Support: ChatGPT can help with the creation or evaluation of manuals, reports, publications, and other written materials in technical domains. It can aid in ensuring that the language used is accurate, coherent, and clear (Fitria, 2023).</p> <p>4. Simulated Professional Communication: ChatGPT is a useful tool for imitating professional conversations that students may have. Situations like client meetings, job interviews, negotiations, and customer service exchanges can fall under this category (Kalla & Smith, 2023).</p> <p>5. Problem-Solving and Decision Support: ChatGPT can help with problem-solving in domains like computer science and engineering by offering recommendations, justifications, and possible solutions depending on the information supplied (Su & Yang, 2023).</p>	<p>curating or generating appropriate resources (Sukying et al., 2023).</p> <p>3. Diverse Learner Backgrounds: ESP classes may consist of learners with varying levels of prior knowledge and experience in the field. Adapting instruction to meet the needs of a diverse group can be demanding (Sukying et al., 2023).</p> <p>4. Keeping Pace with Industry Changes: Industries evolve over time, with new terminology, practices, and technologies emerging. ESP teachers must stay updated to ensure that their instruction remains relevant (Anas & Musdariah, 2018).</p> <p>5. Authenticity of Materials: It can be challenging to source or create authentic materials that accurately reflect real-world situations in the specific field. Authenticity is crucial for effective ESP instruction (Sukying et al., 2023).</p> <p>6. Cultural and Cross-Cultural Understanding: Teaching ESP often involves an understanding of cultural nuances and cross-cultural communication, which may require</p>
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<p>6. Cultural and Cross-Cultural Communication: ESP often involves understanding cultural nuances and cross-cultural communication. ChatGPT can be used to provide insights, explanations, and examples related to cultural practices and conventions in specific professional contexts (Baskara, 2023).</p> <p>7. Accessibility and Inclusivity: ChatGPT can be used to provide support for individuals who may have language barriers or specific communication needs within their professional fields. This can enhance accessibility and inclusivity in various domains (da Silva, 2023).</p> <p>8. Professional Development and Training: ChatGPT can be integrated into e-learning systems to provide professionals in particular industries with training materials and on-demand support. It can offer justifications, examples, and more materials (S. M. A. A. Ahmed et al., 2023).</p> <p>It's important to note that while ChatGPT shows promise in these areas, there are limitations and ethical considerations. For example, it should be used as a complement to, rather than a replacement for, human expertise. Additionally, it's crucial to ensure that the information provided by ChatGPT is</p>	<p>additional training and sensitivity (Liton, 2016).</p> <p>7. Balancing Language and Content: Striking the right balance between teaching language skills and content knowledge is essential. ESP teachers need to ensure that learners gain both linguistic proficiency and subject-specific knowledge (Iswati & Triastuti, 2021).</p> <p>8. Assessment and Evaluation: Designing assessments that accurately measure learners' language proficiency and their understanding of the subject matter can be complex (Fitria, 2020).</p> <p>In fact, even though ChatGPT provide a lot of benefits for the teaching and learning process, it faces its own challenges, for instance:</p> <p>1. Lack of Human Expertise: ChatGPT lacks the expertise and contextual understanding that human teachers possess. It may not be able to provide nuanced explanations or insights (Ausat et al., 2023).</p>
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<p>accurate and up-to-date, especially in fields where precision is critical.</p>	<p>2. Inability to Address Pedagogical Concerns: It may not be equipped to address broader pedagogical issues or adapt to diverse learning styles and needs (Sharma & Yadav, 2022).</p> <p>3. Potential for Inaccurate Information: While advanced, ChatGPT can still generate incorrect or misleading information, especially in complex or evolving fields (F. Ali, 2023).</p> <p>4. Limited Interpersonal Skills: ChatGPT may not be as effective in developing learners' interpersonal communication skills, which are crucial in professional contexts (F. Ali, 2023).</p>
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DISCUSSION

To enrich the collected data in the findings, this section will elaborate on other supported Peer-reviewed articles, books, conference proceedings, and reputable reports.

Some potential findings and applications related to the **benefits** of ChatGPT in ESP:

1. Domain-Specific Assistance

In specialized industries, ChatGPT can be trained or adjusted to offer more accurate and contextually appropriate responses by using domain-specific language and expertise. For example, a ChatGPT model might be customized to help with technical support, medical diagnosis, or legal advice (Su & Yang, 2023).

Moreover, there are detailed explanation of domain-specific assistance:

- a. **Specialized Terminology:** In any specific field, there is often a set of specialized terms and jargon that may not be commonly used in everyday language. A domain-specific language model is trained to understand and use these terms appropriately.
- b. **Contextual Understanding:** The model is trained to understand the context in which the specialized terms and concepts are used. For example, in medicine, the word "heart" can refer to both the organ and a suit in a deck of cards. A domain-specific model would understand the medical context.
- c. **Accuracy and Precision:** Domain-specific models are designed to generate responses with a higher degree of accuracy and precision within their specific domain compared to a general-purpose language model. This is because they have been fine-tuned on data from that particular field.
- d. **Generating Relevant Information:** When asked questions or given prompts related to the domain, a domain-specific model can generate relevant and informative responses. For example, in a medical context, it can provide information about symptoms, treatments, or medical conditions.
- e. **Supporting Professionals and Learners:** Domain-specific assistance can be invaluable for professionals working in a specific field. It can help with tasks like drafting technical documents, providing explanations for complex concepts, and suggesting potential solutions to problems.
- f. **Language Support for Learners:** For individuals learning a new field, a domain-specific model can offer assistance with understanding and using the terminology correctly. It can also provide explanations and examples to clarify concepts.
- g. **Customizability:** Domain-specific models can be further fine-tuned to adapt to a specific organization's or user's needs. This means that it can be tailored to better align with the specific terminology and practices of a particular company or institution.
- h. **Limitations and Caveats:** While domain-specific models excel within their designated field, they may struggle with general topics or out-of-domain queries. It's important to be aware of the model's limitations and not rely on it for areas outside of its specialization.

In other words, domain-specific assistance is a powerful application of language models like ChatGPT, as it allows them to provide highly relevant and accurate information in specific professional or academic contexts. This can enhance productivity, support learning, and improve communication within specialized fields (Bin-Hady et al., 2023; Haluza & Jungwirth, 2023; Kovačević, 2023).

The literatures consistently highlight the ability of ChatGPT in English for Specific Purposes (ESP) to address the linguistic needs of learners within specialized contexts. Researchers across various disciplines concur that ESP's tailored approach enhances learners' proficiency and communicative competence. Numerous studies indicate that learners who engage in ESP programs report increased confidence in utilizing domain-specific language and discourse conventions. It is based on need analysis and authenticity of the principles of ESP. The literature underscores the main goal of needs analysis in ESP. Hutchinson & Waters (1987) advocate for a learner-centered approach that begins with identifying learners' communication purposes and contexts. This foundational principle ensures that instructional content is relevant, engaging, and aligned with learners' goals (Pranoto & Suprayogi, 2020). Moreover, the integration of authentic materials, as proposed by Swales (1990), emerges as a key pedagogical strategy. Authentic materials expose learners to real-world language use, enabling them to engage with domain-specific vocabulary, discourse patterns, and communicative strategies (Ekayati et al., 2020).

2. Language Learning and Teaching

In language learning and teaching, ChatGPT can offer immediate responses, clarifications, and illustrations of certain vocabulary and ideas. It can play a valuable role in Language Learning and Teaching, especially in the context of English for Specific Purposes (ESP). ESP focuses on teaching English in specialized fields like business, medicine, law, engineering, and others (Kohnke et al., 2023)

To make it clear, the benefits of ChatGPT in language learning and teaching context include specialized vocabulary and contextual understanding, immediate feedback and clarification, personalized learning materials, contextual learning practice, fit with cultural and professional norms, 24/7 availability, scaffolding and gradual complexity, professional exam preparation, and diverse learners' accessibility (S. M. A. A. Ahmed et al., 2023).

It's important to note that while ChatGPT can be a powerful tool in language learning, it should not replace human instructors or the interactive aspects of language education. It works best as a supplement to formal instruction, providing additional practice, support, and resources. Additionally, it's crucial to ensure that the content generated by ChatGPT is accurate and appropriate for the learner's level and context (Fuchs, 2022). Monitoring and guiding the interactions with the model is essential for effective language learning.

Moreover, the effectiveness of language learning is related to the Content and Language Integrated Learning (CLIL) and ESP where ChatGPT becomes a bridge to integrate teaching ESP and CLIL in terms of methodologies, attitudes, and guiding concepts. There are many

viewpoints on how those two are related to one another, but it's crucial to note that the CLIL approach has its roots in ESP, as demonstrated in the chapters before it (Arnó-Macià & Mancho-Barés, 2015; Del Pozo, 2017; Ruiz-Garrido & Fortanet Gómez, 2009).

Teaching ESP and CLIL address the ideas of Content-Based Language Learning (CBLL) and Task-Based Learning (TBL), which are discussed in Chapter 1 and are both primarily based on the Learner-Centered Approach. In this analysis, ESP serves as a representation of the B1 degree framework in which English and specialist topic subjects are taught in accordance with the CEFR. Thus, the chosen communicative competencies on the B1 degree are transformed into the language expert field (Kováčiková, 2020).

3. Writing support

ChatGPT can help with the creation or evaluation of manuals, reports, publications, and other written materials in technical domains. It can aid in ensuring that the language used is accurate, coherent, and clear (Fitria, 2023).

In line with that, ChatGPT became a useful media to fulfill what Larsen-Freeman (2000) illustrated by using contents from other subjects for pedagogical purposes namely, Content-Based Instruction (CBI) which has similar concept with CLIL. By the years, Richards & Rodgers (2014) developed CBI in the following types;

a. Theme-based language instruction

Language course in syllabus that was created based on a certain topic or themes; for instance, “computer” or “woman empowerment”.

b. Sheltered content instruction

A subject area expert instructs a group of ESL learners who have been categorized for this purpose through content courses in the second language.

c. Adjunct language instruction

Pupils are enrolled in two related courses: a language course and a content course. The courses complement one another with regard to mutually coordinated tasks and share the same body of content.

d. Team-teach approach, as a variation on the adjunct approach specifying the expected roles of the language teacher and the subject leader.

e. Skills-based approach

Characteristic by a specific focus on an academic skill area specifically; for instance, “scientific writing”.

4. Simulated Professional Communication

Based on (Kalla & Smith, 2023), ChatGPT is a useful tool for imitating professional conversations that students may have. Situations like client meetings, job interviews, negotiations, and customer service exchanges can fall under this category. In line with that, business English has become a real example where ChatGPT is able to be integrated into it.

English for Specific Purposes (ESP) has recently seen a boom in the field of English for Business Purposes (EBP), both in terms of research and instruction. This is due to the fact that Non-native English speakers are increasingly using the language to communicate 'about business' with large target audiences worldwide, including (potential) employees, customers, and investors, whose reasons for conducting business differ greatly from nation to nation, as well as to conduct direct business (in meetings, negotiations, emails, and letters).

In linguistic terms, it is challenging to define and categorize business English. Picked emphasized that business communication has multiple facets, some of which are far more in line with the language used by the general public than those of many other ESP groups.

ChatGPT potentially could replace a business English teachers

To put it realistically, ESP instructors are sometimes just teaching business English; however, ESP participants need highly skilled self-taught language instructors especially through self-study in a specific area of ESP. In this case, ChatGPT appears as the suitable answer.

However, Business English (BE) teachers are needed to play the role of internalizing the viewpoint of consultants to a greater extent when dealing with more specific guidelines and sophisticated provider content in the coaching material. So ChatGPT is still unable to take over the whole teaching process (Rahman & Watanobe, 2023).

5. Problem-Solving and Decision Support

On the other hand, teachers' role is getting weak since they must rely on their beginners to convey job-specific substances in class—especially if BE instructors aren't particularly informed about the problem content material that is being taught—many BE instructors no longer even play the role of enter and substances' carriers. At this point, ChatGPT could become a teacher's friend or vice versa (Sumakul et al., 2022). It is reasonable since the learning process must go on. Therefore, it can become problem-solving and decision-support. For instance, ChatGPT can help with problem-solving in domains like computer science and engineering by offering

recommendations, justifications, and possible solutions depending on the information supplied (Su & Yang, 2023).

6. Cultural and Cross-Cultural Communication

ESP often involves understanding cultural nuances and cross-cultural communication. ChatGPT can be used to provide insights, explanations, and examples related to cultural practices and conventions in specific professional contexts (Baskara, 2023). Furthermore, to promote real human connection and cross-cultural understanding, ChatGPT strikes a balance between technology and conventional teaching techniques. It also offers potential opportunities for global mobility and cross-cultural communication. Baskara also adds to the growing body of knowledge regarding artificial intelligence in education and its effects on international mobility and intercultural dialogue.

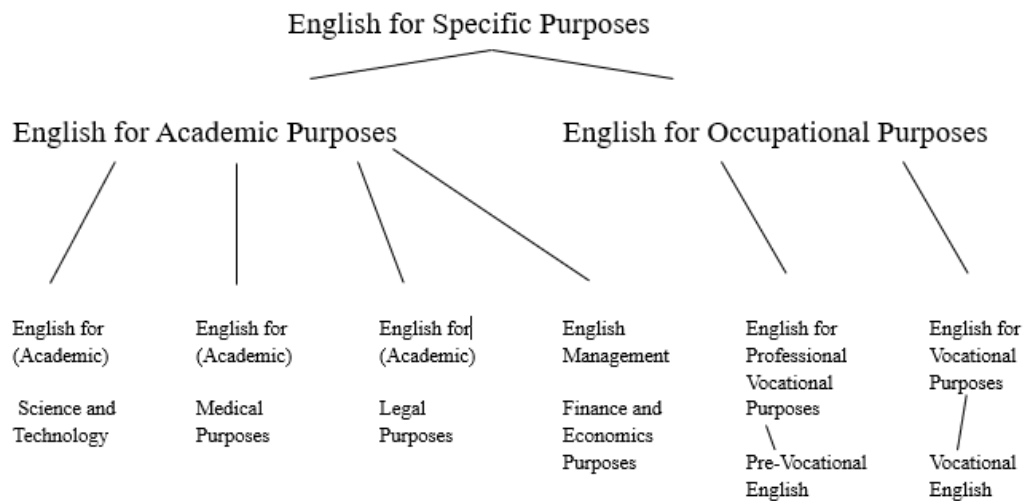
7. Accessibility and Inclusivity of Professional Development by using ChatGPT.

ChatGPT can be used to provide support for individuals who may have language barriers or specific communication needs within their professional fields. This can enhance accessibility and inclusivity in various domains (da Silva, 2023). Moreover, it can be integrated into e-learning systems to provide professionals in particular industries with training materials and on-demand support. It can offer justifications, examples, and more materials (S. M. A. A. Ahmed et al., 2023).

The Contexts in English for Specific Purpose

ESP is the time frame that has traditionally been applied to manuals that try to teach English language necessary for specific circumstances, particularly those connected to education or the workplace. Numerous works address the current trends in this topic. There have been some unusual attempts to classify ESP. For instance, "the tree of ELT" is among the first real ones (Hutchinson & Waters, 1987).

Furthermore, an additional ESP is categorized based on their professional field or discipline. ESP separates EAP and EOP into the following categories based on professional area or discipline: 2) EOP includes English for Professional Purposes (English for Medical Purposes, English for Business Purposes – EBP) and English for Vocational Purposes (Pre-vocational English and Vocational English); in EAP, EST has been the main area, but EMP and ELP have always had a student's place. 1) EAP involves English for (Academic) Science and Technology (EST), English for (Academic) Legal Purposes (ELP), and English for Management, Finance and Economics. Dudley-Evans & St John (1998) devised a tree diagram for ESP, which divides EAP and EOP is illustrated in figure below.



Different English for Specific Purposes styles can be distinguished from one another by their specific specializations. English for Science and Technology, English for Business and Economics, and English for Social Sciences form three main divisions, but those branches further subdivide. The relationship between General English and ESP, which are individually depicted as distinct classes of English language coaching as a second or foreign language (ESL, EFL), but with their common location roots, can be seen when we visualize English language coaching as a tree.

Some discussion related to the **challenges** of the teachers by the existence of ChatGPT in ESP:

While the literature acknowledges ESP's effectiveness, it also recognizes implementation challenges. Access to up-to-date and contextually relevant authentic materials can be problematic, especially in rapidly evolving fields (Bhatia et al., 2011). Furthermore, challenges in ESP implementation touch teacher's knowledge and competence such as lack of teachers disciplinary (Medrea & Rus, 2012), lack of training (S. U. Ali, 2015; Hoa & Mai, 2016; Nguyen et al., 2019), lack of proper need analysis (Dudley-Evans & St John, 1998), over-quantity classes (Harmer, 2001), and varied student's competence (Hoa & Mai, 2016). However, innovative approaches are emerging. Digital platforms and online repositories provide educators with a wider range of authentic resources, overcoming some of the challenges associated with material acquisition (Agolli, 2018; Ekayati et al., 2022; Hoa & Mai, 2016).

Furthermore, this study has mentioned several challenges that teachers face in teaching English for Specific Purposes (ESP) compared to using ChatGPT or similar language models such as ;

a. Specialized Content Knowledge

ESP teachers often need a deep understanding of the specific field in order to effectively teach the language in context. This requires expertise in the terminology, concepts, and practices of the targeted industry or profession (Iswati & Triastuti, 2021). It is related to the discussion across the literature that emphasizes the importance of contextual adaptation in ESP instruction. The dynamic nature of specialized communication contexts requires educators to stay attuned to evolving linguistic demands (M. K. Ahmed, 2014). While educators in ESP context have a low understanding of specific fields, ChatGPT could do the rest (Sumakul et al., 2022).

b. Resource Availability, Diverse learner's background, and materials authenticity

According to Sukying et al (2023), Finding and creating relevant and up-to-date teaching materials for specific fields should be concerned by ESP teachers in order to curate or generate appropriate resources. Moreover, ESP classes may consist of learners with varying levels of prior knowledge and experience in the field. Adapting instruction to meet the needs of a diverse group can be demanding. In addition, It can be challenging to source or create authentic materials that accurately reflect real-world situations in the specific field. Authenticity is crucial for effective ESP instruction

Implications for Language Education

The synthesis of the literature has broader implications for language education. The learner-centered approach advocated by Munby (1981) aligns with contemporary educational philosophies that value individualized instruction. The integration of authentic materials and emphasis on contextually relevant communication echo trends in communicative language teaching (Benavent & Peñamaría, 2011; Borucinsky & Jelčić-Čolakovac, 2020; Tursunovna, 2021). Additionally, the prominence of needs analysis highlights the importance of understanding learners' goals and contexts in curriculum design (Brown, 2016; Otilia & Brancusi, 2015).

The primary distinction with ESP is that, in addition to the humanities and languages, the English curriculum is tailored to the needs of first-year students in certain fields (Fortanet-Gómez & Räisänen, 2008). ESP focuses on terminology used in specific fields, such as finance, technology, medicine, and law. "While knowledge of the issue and its terminology is important, it's important to remember that what's being taught is the use of the English language in a particular context," the organization says.

In our context and in this study, English for Special Purposes refers to the general term for English language instruction offered at colleges that do not specialize in philology. A lot of bureaucracy may also be addressed due to its varied objectives and contents. It plays a significant role in postsecondary education when university students wish to use English to advance their academic careers (Carver, 1983; Widdowson, 1982). According to Dudley-Evans (1998), ESP instructions can be created specifically for a field, such as mechanical engineering or medical. These guides may employ a different technique than popular English coaching, such as guides that are customized for the specific modalities that are most frequently used in the targeted field.

c. Adapt with Industrial Development and Cross-Cultural Understanding

Industries evolve with new terminology, practices, and technologies emerging. ESP teachers must stay updated to ensure that their instruction remains relevant (Anas & Musdariah, 2018). Furthermore, Teaching ESP often involves an understanding of cultural nuances and cross-cultural communication, which may require additional training and sensitivity (Liton, 2016).

d. Balancing Language and Content.

ESP teachers need to ensure that learners gain both linguistic proficiency and subject-specific knowledge (Iswati & Triastuti, 2021). The goal of linguistic proficiency is to increase one's vocabulary with subject matter expertise while also focusing on the four communication skills—reading, speaking, listening, and writing. Much attention has been given to the Content-Primarily Based Language Learning (CBL) and Task-Primarily Based Language Learning (TBLL) strategies within Communicative Language Teaching (CLT), as is also evident in ESP guidelines. The convergence of ESP with other disciplines is discussed in the electronic book authored by (Sato & Kleinsasser, 1999; Savignon, 1991). In terms of content balancing, the authors claim that linguistic issues during the construction of an ESP direction are unavoidable for ESP instructors to deliver process-applicable, helpful pedagogy and methodology.

e. Assessment and Evaluation

It accurately measures learners' language proficiency and their understanding of the subject matter can be complex (Fitria, 2020). Based on Kohnke et al (2023), Teachers can also ask ChatGPT to generate comprehension and expansion questions (open-ended or multiple-choice) to accompany reading tasks. In other words, the creativity of teachers in conducting assessment and evaluation will be affected.

8. The Challenges of ChatGPT in the Teaching and Learning Process

Although ChatGPT can become a powerful support in the learning and teaching process, even though it almost replaces the teacher's role, some interesting points emphasize that artificial intelligence is still unable to take over the whole educational process.

a. Lack of Human Expertise:

ChatGPT lacks the expertise and contextual understanding that human teachers possess. It may not be able to provide nuanced explanations or insights (Ausat et al., 2023). It is important to remember that technology can only serve as a tool and cannot completely replace the function of the instructor when it comes to using ChatGPT in the classroom. As a result, it's critical to increase instructors' competency in managing technology-assisted learning as well as to integrate technology into the classroom appropriately and effectively. In this instance, instructors' roles in the educational process are still crucial. To effectively integrate technology into the teaching and learning process, educators must possess a solid understanding of the tools being employed. Teachers also need to acquire new competencies and skills for overseeing technology-assisted learning. In addition, Kostka & Toncelli (2023) amplify that nowadays, the teacher's role is altered but irreplaceable. It gives educators a great chance to comment on cutting-edge approaches to what new information and skills children should be learning as well as how learning and evaluation should be done in the twenty-first century.

b. Inability to Address Pedagogical Concerns:

It may not be equipped to address broader pedagogical issues or adapt to diverse learning styles and needs (Sharma & Yadav, 2022). Moreover, human expertise is related to teachers' and student's responsibilities. The learners' objectives for learning English and their actual goals are the most important differences. The majority of ESP students are adults who are studying the language to fulfill a specific job-related function and communicate a set of professional talents (Ghafournia & Sabet, 2014). Thus, the foundation of an ESP program is an evaluation of the objectives, requirements, and functions that call for the use of English. It is related to the natural responsibility of teachers and students to build a learning atmosphere that is related to human's inner capacity that will not exist in artificial intelligence.

The responsibility of the teacher

The instructors assume and believe that to be an excellent communicator, you must be a good instructor, but when they are put in the lecture room environment, they locate themselves searching out extra coaching to reach their coaching career. For instance, an instructor should also become a counselor who is a good, intelligent, creative, sincere, and energetic person (Wheeler & McLeod, 2002). Besides that, before dealing with the concept of the ESP instructors

training. It would like to clarify the difference between instructor training and instructor development. The teacher training approach puts together the professional duties for individuals who intend to train in English for the primary time, which is likewise known as pre-carrier training (Fitria, 2020).

There are three main responsibilities of the teacher in the ESP context; 1) Organizing Course, when the teacher should set getting to know desires after which rework them into an educational software with the timing of activities. One of the teacher's major duties may be altering, constructing, and maintaining materials direction, helping the scholars, and offering students comments on the student's progress. 2) Setting goals and objectives, when the teacher sets up the situations for studying within the study room and sets long-term desires and short-term goals for college students' achievement. The teacher's understanding of pupils' abilities is valuable in creating a syllabus with practical desires that take into consideration the students' problems within the studying situation. 3) Designing a conducive learning atmosphere when the teacher's abilities for verbal exchange and mediation create the study room atmosphere. Students acquire language when they have the opportunity to use it in interaction with various speakers. As their instructor, you will be the most effective English-speaking individual available to them, and even if your time with any of them is limited, you will be able to shape significant verbal interaction abilities within the classroom.

The Responsibility of Students

Beginners come to the ESP elegance with a specific study hobby, problem count knowledge, and well-constructed individual studying tactics. They are rapidly developing English language skills to match their native-language knowledge and talents.

1. Learning Preferences

When given the chance to understand and use language in a context they find engaging and understandable, people learn languages. This perspective states that ESP is a useful technique for such scenarios. Working with resources that they find engaging and pertinent—things they may use for their studies or professional work—students will acquire English as they go.

2. Subject-content Literacy

Students are typically aware of the reasons they might choose to utilize English during the ESP courses. They view their English education as a supplement to the subject of study on which they have already focused their schooling. By identifying the problem's location, the scholars can choose a true context for the ESP classroom's vocabulary and methods. In this

sense, the knowledge that newcomers to the field of English studies have regarding the various challenges may prove advantageous.

3. Studying Techniques

To acquire a new language, adults have to put in more effort than children do, but because of their superior learning skills, they can pick up the language more quickly and effectively. Studying English will be made easier by the proficiency they already possess in speaking in their original tongues. The individual working in the ESP study room most likely has exceptional language study skills, even if you'll be working with college students whose English proficiency is probably going to be rather low. Since learning a language is something we do throughout our entire lives, educated adults typically study the new language behaviors of their native tongues (Fiorito, 2006).

ChatGPT seems like a perfect match to fulfill those students' responsibilities in learning. However, in reality, it is not as perfect as what it should be since ChatGPT could lead to incorrect information, and decrease students' interpersonal skills.

c. Potential for Inaccurate Information:

Sumakul et al (2022) emphasized that ChatGPT could be claimed as a friend in the educational environment by their finding regarding the use of AI technology in their English as a Foreign Language (EFL) schools, the participants had positive opinions. Differently, F. Ali (2023) demonstrated that ChatGPT can still generate incorrect or misleading information, especially in complex or evolving fields.

d. Limited Interpersonal Skills:

ChatGPT may not be as effective in developing learners' interpersonal communication skills, which are crucial in professional contexts (F. Ali, 2023).

E. CONCLUSION

Artificial Intelligence, specifically ChatGPT, changes a lot of teaching and learning processes technologically. There are some benefits of ChatGPT involvement in English for Specific Purposes (ESP) context, such as domain-specific assistance, escalated language learning and teaching technique, writing support, professional communication simulation, problem-solving support, enhanced cross-cultural communication, and increased accessibility of professional development based on ESP principle.

ChatGPT can become a tool to support teachers but is unable to replace teachers' roles in the classroom. It could be a supportive instrument to overcome teachers' challenges in teaching ESP by involving ChatGPT to answer their teaching challenges such as; 1) Acquiring a deep

understanding of specific and specialized content knowledge based on certain fields, 2) increasing learning resource availability, 3) adapt with industrial development and cross-cultural boundaries in communication, 4) balancing language and content, and 5) get a technological support to construct assessment and evaluation instrument.

However, ChatGPT is not only present with those advantages but also disruption in an educational context. It has become a big challenge for teachers and students to deal with the impact of the disruption of ChatGPT such as lack of human expertise, inability to deliver the essence of pedagogical concern, inaccurate information occasionally, and limited interpersonal skills. In other words, those are some new challenges for teachers and students to be concerned about regarding the weaknesses of ChatGPT. It also amplified that technology is still unable to take over the teaching process and replace teachers' role, at least for this time.

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