

## The Using Of *Chatgpt* In Deformity Of ESP Material For Health Students In The Higher Education

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### ABSTRACT

*The use of ChatGPT in developing teaching materials can be used to adjust the needs of ESP teaching materials. Artificial Intelligence (AI) in education has brought significant changes, especially in the development of English for Specific Purposes (ESP) materials. This study explores the use of ChatGPT, a generative AI tool, in redesigning and supporting the creation of ESP learning content for health students in higher education. Using a qualitative literature study approach, this study examines the opportunities, benefits, and challenges in implementing ChatGPT in the ESP context. The results of the study indicate that ChatGPT offers several advantages, such as time efficiency in material development, the ability to adjust content to learners' needs, support for interactive and contextual learning, and assistance in the assessment process. However, there are also challenges such as the potential for inaccurate information, limitations in sensitivity to certain areas, and the need for human validation. This study concludes that although ChatGPT cannot replace the role of educators, this technology can be a valuable tool in modern ESP teaching in the health field. Further empirical research is needed to evaluate the long-term impact on students' learning outcomes and professional language competencies.*

**Keywords:** ChatGPT, English for Specific Purpose, Health Student

### INTRODUCTION

English for Specific Purposes (ESP) is an approach to English language teaching that focuses on the language needs of specific academic or professional fields, such as health, engineering, tourism and economics. In higher education, ESP plays an important role in equipping students with language skills relevant to their disciplines. Especially in the healthcare field, English language skills are not only important for understanding scientific literature, but also indispensable in communicating with foreign patients, attending international seminars, and reading and writing scientific articles. However, one of the main challenges in teaching ESP is the lack of teaching materials that are specific and appropriate to certain scientific fields, such as physiotherapy, nursing, or radiology. Most of the available English textbooks are still general English and do not include technical terms, professional contexts, or communication scenarios that suit the needs of students in the health sector. This condition causes lecturers to struggle to compile materials manually, which certainly requires time, resources, and cross-field understanding.

As technology advances, now comes ChatGPT, a natural language-based artificial intelligence model developed by OpenAI. ChatGPT can generate fast and relevant text based on user requests. In the context of ESP learning, ChatGPT can help lecturers develop contextual materials, such as reading texts about physiotherapy procedures, dialogues between patients and therapists, and practice questions based

on medical terminology. Thus, ChatGPT offers efficiency in the process of developing teaching materials as well as flexibility in customizing materials to specific topics.

Not only for lecturers, the presence of relevant ESP teaching materials is also very beneficial for students. Materials that are suitable for their field of study can increase learning motivation, understanding of technical terms, and professional communication skills in English. This is an important provision for health students who will enter the global workforce that demands strong foreign language competence.

Through this research, the author would like to further examine how ChatGPT can be utilized as a tool in the development of ESP teaching materials, especially for students in the health sector, and examine its potential and challenges based on the latest literature review.

## **LITERATURE REVIEW**

### **A. English for Specific Purposes (ESP)**

English for Specific Purposes (ESP) is an approach to English language teaching designed to meet professional or academic communication needs in a specific field, such as health, engineering or business. ESP emphasizes the use of language appropriate to the specific context, including technical terminology and communication situations typical of the field. In the context of higher education, ESP plays an important role in equipping students with language skills relevant to their disciplines. However, the main challenge in teaching ESP is the limitation of teaching materials that are specific and suited to the needs of each field. Most of the available materials are still general in nature and do not cover technical terms or communication situations that are typical in a particular field.

According (Williams, 2014) English for Specific Purposes (ESP) English for Specific Purposes (ESP) is an approach to English language learning that focuses on the specific needs of learners in a particular academic or professional context. Hutchinson dan Waters (1987) in (Williams, 2014) argued that , ESP is a learner-centered approach, where "all decisions regarding content and methods are based on the rationale for learning. English for Specific Purposes (ESP) is an approach to learning English that is tailored to the specific needs of certain fields, such as medicine, nursing, and other health professions. ESP aims to equip students with language skills relevant to their professional context, including understanding medical terminology, patient communication, and academic writing in the health field.

English for Specific Purposes (ESP) is an approach to English language learning designed to meet specific communication needs in a particular academic or professional context. In healthcare, ESP aims to equip students with relevant language skills for academic study and professional practice according to (Ibrahim, 2020) ESP in medical education should consider the specific needs of students and the challenges they face in understanding English medical materials. Students in the healthcare field require a variety of language skills, including reading medical literature, writing clinical reports, and communicating with patients and peers. (Abdelhafiz et al., 2025) stated medical students need reading and speaking skills more than other skills and

suggest an increase in English class hours and an emphasis on ESP over EAP to prepare them for medical studies. ESP materials are important in teaching English to health students

## **B. English Language Needs in the Health scope**

English plays a crucial role in the world of healthcare, especially in the era of globalization and digitalization. (Purwana et al., 2023) stated English proficiency allows healthcare workers to access international medical literature, communicate with foreign patients and international colleagues and can also take part in international training and seminars. (Saud, 2025) argued adds that health professionals in Indonesia recognize the importance of English language training to improve quality of care and career development. (Halimatussakdiah & Munazar, 2021) showed that students majoring in nutrition need English language materials that are relevant to their academic and professional contexts. This emphasizes the importance of developing a syllabus that meets the specific needs of the students.

(Gayessa & Mohammed, 2024) found that health science students had good grammar and reading skills, but were weak in listening and writing skills, which resulted in difficulties in understanding medical terminology and describing patient cases. Studies conducted by (Rinawati et al., 2022) at the Faculty of Medicine of Sultan Agung Islamic University show that medical students consider English very important for reading scientific articles, listening to medical presentations, and writing prescriptions or medical reports. This confirms that specific English language skills in a medical context are needed in the learning process and clinical practice.

## **C. Use of ChatGPT to develop teaching materials**

ChatGPT, as an artificial intelligence-based language model, has the potential to support the development of ESP materials by providing customized and interactive content. ChatGPT was used to generate relevant ESP materials, suggesting that this tool can assist in creating content that fits the specific needs of the healthcare field. (Zaib et al., 2023) show that ChatGPT can be used to simulate clinical situations, assisting students in developing medical communication skills such as Personalization of Learning i.e. ChatGPT can tailor materials based on the individual needs of students, enabling a more personalized and effective approach to learning. Time and Resource Efficiency with the ability to generate content quickly, ChatGPT helps teachers to save time in the creation of teaching materials. Increased Student Engagement through Interactivity offered by ChatGPT can increase student engagement in the learning process, especially in teaching and learning.

Studies by (George Pallivathukal et al., 2024) ) revealed that health students had positive perceptions of using ChatGPT in learning. They rated ChatGPT as helpful in understanding the material, organizing assignments, and improving learning efficiency. However, there were concerns regarding the accuracy of information and the potential for overdependence. (Hasanein & Sobaih, 2023), argued that it is important for educational institutions to establish guidelines for the use of ChatGPT to address these challenges. While offering a range of opportunities, the use of

ChatGPT also presents some challenges, such as Content Quality and Accuracy where ChatGPT may produce information that is inaccurate or lacking in medical context, requiring verification by faculty. Furthermore, Ethics and Plagiarism The use of ChatGPT may raise concerns regarding plagiarism and the originality of student work and Technology Dependency Over-reliance on ChatGPT may hinder the development of students' critical and independent thinking skills.

Several studies have explored the use of ChatGPT in English language learning. According to (Laili et al., 2025) found that health students in Indonesia utilized ChatGPT to improve their English skills, although they realized the importance of verifying the information provided by the AI.(Glahn, 2024) conveyed that the integration of ChatGPT in English for Academic Purposes (EAP) classes helped students in understanding the material and increased active participation. According to (Han et al., 2023) shows that the integration of ChatGPT in English as a foreign language (EFL) learning can improve the quality of students' writing through feedback provided by AI. The RECIPE platform developed in the study allows interaction between students and ChatGPT in the essay revision process.

ChatGPT, as an artificial intelligence-based language model, offers great potential in assisting the development of ESP teaching materials. With its ability to generate coherent and relevant text based on user requests, ChatGPT can be used to Compose reading texts or dialogues appropriate to the context of a particular field. ChatGPT can Generate practice questions or quizzes based on specific terminology and assist in the translation of technical terms. ChatGPT can also provide feedback on student writing. In addition, research by (Cha, n.d.2024) introduced the CHOP platform that utilizes ChatGPT for oral presentation practice in an EFL context. The results show that ChatGPT can provide useful feedback in improving students' speaking skills. Students in healthcare fields, such as nursing, physiotherapy and medicine, require a mastery of English that includes not only general skills, but also an understanding of medical terminology and the ability to communicate in a clinical context. These skills are essential for reading scientific literature, communicating with foreign patients, and keeping up with the latest developments in the healthcare field. However, the limitations of ESP teaching materials specific to the health sector are often an obstacle in the learning process. Lecturers and teachers need to develop materials that suit the needs of students, which require a lot of time and resources.

## **RESEARCH METHOD**

This research uses a qualitative approach with a library research method. Library research was conducted to collect, analysed and synthesized relevant information about the use of ChatGPT in the development of English for Specific Purposes (ESP) teaching materials. This approach was chosen because it aims to understand more deeply the existing theories and explore various findings from previous research on this topic.

## RESULT AND DISCUSSION

ESP materials are designed to meet the needs of professional communication in specific contexts, such as the healthcare field. In medical and nursing education, ESP helps students master medical terminology, read scientific literature, and communicate effectively with patients and peers. A study by Mustari and Arnika (2025) showed that ESP programmed improved students' understanding of medical terminology and their confidence in speaking and listening in a clinical context. The integration of technology, such as virtual patient simulation, also enriches students' learning experience.

ESP allows customisation of learning materials to the specific needs of students in the healthcare field. Through needs analysis, ESP materials can be focused on the most relevant skills, such as reading medical journals, writing patient reports, or communicating in clinical situations. Research by Rinawati et al. (2022) emphasises the importance of needs analysis in designing effective ESP programmes for medical students.

According (Zaidi & Al Jadaan, 2022) found that students from non-English backgrounds have difficulties in understanding medical vocabulary, and ESP can help overcome these difficulties. Healthcare students often face challenges in understanding medical terminology in English. ESP helps overcome this barrier by providing exercises that are focused on vocabulary and language structures used in medical contexts.

A study by (Naamati-Schneider, 2024) showed that the use of ChatGPT in health management learning can improve critical thinking skills and information evaluation. Students reported that ChatGPT helped them in understanding complex concepts and provided quick access to relevant information. In addition, ChatGPT can also act as a virtual tutor that provides instant feedback and assists students in organizing academic writing. This is in line with the findings from (Jo, 2024) which states that ChatGPT can improve learning efficiency and assist students in developing academic writing skills.

English has an increasingly crucial role to play in healthcare in this era of globalization and digitalization. English proficiency not only expands access to the latest medical information but also improves the quality of communication between healthcare professionals and patients from different cultural backgrounds. Here are some of the reasons why mastering English has become an essential requirement in healthcare. Quoted from (5 Minute English, n.d.) mentioned that Most medical literature, scientific journals, and clinical practice guidelines are published in English. The ability to understand English enables healthcare workers to access the latest research, keep up to date with medical science, and implement evidence-based practices in healthcare. This is crucial to ensure that patients receive care that is in line with international standards.

(Babbel for Business, n.d.) also says that in an increasingly multicultural healthcare environment, the ability to communicate in English is key to understanding patient needs, explaining diagnoses, and providing clear treatment instructions.

Effective communication can improve patient satisfaction, reduce the risk of medical errors, and strengthen the relationship between patients and healthcare providers. (Schkinder, 2024) mentions that English is often used as the language of instruction in international collaboration in health, including in pandemic management, joint research, and cross-border training programmed. English proficiency enables health workers to actively participate in global discussions, share knowledge, and adopt best practices from different health systems around the world.

Studied by (Saud, 2025) highlights that healthcare workers in Indonesia recognized the importance of English language training in a medical context to improve the quality of patient care and work efficiency. However, they face challenges such as the lack of specific English for Medical Purposes (EMP) programmed, time constraints due to busy work schedules, and psychological barriers such as lack of confidence. The participants recommended the development of EMP courses tailored to real medical scenarios and flexible training schedules.

(Chan et al., 2022) showed that medical students in international medical programmed viewed English language skills as a professional and social necessity during medical training and for future practice. They emphasized that mastery of English is not only important for communication with patients and peers, but also for understanding training materials and participating in a diverse academic environment. The use of ChatGPT in the development of teaching materials has become a significant innovation in the world of education, including in the health sector. As a natural language-based artificial intelligence model, ChatGPT offers various advantages that can be utilized by educators to improve the quality and efficiency of the learning process.

There are also several benefits of using ChatGPT to develop teaching materials including, first, according to (Juni, 2025) ChatGPT can assist educators in compiling teaching materials quickly and structured. By providing a specific topic or concept, ChatGPT can generate systematic explanations, create clear learning objectives, and suggest appropriate teaching methods. This is very useful in developing effective lesson plans that are in accordance with the applicable curriculum. second (Juni, 2025) also said that customizing learning materials according to the individual needs of students. ChatGPT can provide additional explanations, practice questions, or learning resources tailored to each student's level of understanding and learning style. This allows for more personalized and effective learning. Thirdly ChatGPT can assist educators in developing evaluation questions, correcting student answers, and providing constructive feedback. This can reduce educators' workload and allow them to focus more on other aspects of teaching and finally educators can utilize technology to deliver learning materials digitally, assign tasks online, and interact with students through digital platforms. This supports ICT-based teaching which is increasingly relevant in today's digital era.

Although ChatGPT offers various advantages, it is important for educators to still verify the materials generated and adapt them to specific learning contexts. Thus, the use of ChatGPT can be an effective tool in developing quality teaching materials that are relevant to students' needs.

## CONCLUSION

This study shows that the use of ChatGPT as a tool in the development of English for Specific Purposes (ESP) materials, especially for health students in higher education, has great potential to improve the effectiveness of the learning process. ChatGPT can assist in the preparation of relevant, fast, and structured teaching materials; customizing content to student needs; and supporting the development of interactive materials and automatic assessment.

Some of the advantages of ChatGPT identified include time efficiency in the creation of teaching materials, flexibility in content modification, as well as its ability to present materials based on medical professional contexts. However, there are challenges that must be considered, such as the potential for information bias, limitations in local and cultural contexts, and the need for validation of materials by competent lecturers or teaching staff. As such, ChatGPT is not a substitute for the role of teachers or lecturers, but rather an innovative tool that can enrich learning, particularly in the context of ESP in health.

Based on the results of this study, it is recommended that the use of ChatGPT in the development of English for Specific Purposes (ESP) teaching materials in the health sector be carried out in a gradual and structured manner. Lecturers and teaching material developers need to be given special training on how to utilize this artificial intelligence optimally, while understanding its limitations. In addition, materials produced by ChatGPT should go through an academic verification process by lecturers or experts in the field of health and English, to ensure accuracy, relevance, and contextual suitability to learning needs. Higher education institutions should also develop technical and ethical guidelines for the use of AI in education, so that the use of this technology remains responsible and supports long-term learning goals. In addition, further empirically based research is needed to further examine the impact of using ChatGPT on learning outcomes, motivation, and professional communication skills of health students. With a careful and targeted approach, ChatGPT can be an innovative tool that enriches the ESP learning process in higher education.

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