AI-Powered Chatbots of ChatGPT: Exploring the Potentials and Challenges in English Teaching and Learning Process

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ARTICLE INFO	ABSTRACT
	In the era of rapid digital transformation, innovations such as ChatGPT have significantly influenced various sectors, particularly education. This library-based research examines the potential benefits and challenges of using ChatGPT in the teaching and learning process. The findings indicate that ChatGPT, a natural language–based artificial intelligence developed by OpenAI, can generate human-like responses and function as a virtual assistant by providing feedback, information, and interactive dialogue. Its educational benefits include personalized learning, immediate feedback, interactive communication, support for teaching materials, enhanced learner autonomy, improved language skills, critical thinking development, and increased student motivation and engagement. However, the use of ChatGPT also presents notable challenges, including risks of biased or inaccurate information, ethical concerns, data privacy issues, plagiarism, overreliance on technology, and the potential marginalization of teachers' roles. To maximize benefits while minimizing risks, educational institutions should integrate ChatGPT as a supportive learning tool rather than a replacement for educators, promote ethical and responsible use, establish clear policies, adapt curricula to digital developments, encourage critical engagement, and continuously monitor technological advancements. Therefore, further empirical research is needed to examine the effective, ethical, and context-sensitive integration of ChatGPT in diverse educational settings.

INTRODUCTION

In the current digital age, technological advancement is increasing. An example of a technology that is gaining popularity is artificial intelligence (AI). Technological advancements in AI have precipitated several noteworthy developments in its extensive implementation and utilization over the last few years (Trust et al., 2023). Recent advances in artificial intelligence have led to the emergence of powerful content-generation models that allow users to instantly produce written texts and digital media through simple text-based prompts. As a result, interest in new AI tools has grown rapidly in recent months. One of the most influential developments in education is ChatGPT, an AI chatbot developed by OpenAI and launched in November 2022. Within four months of its release, ChatGPT reached approximately 100 million monthly active users, making it the fastest-growing consumer application in history. Built on recent breakthroughs in natural language processing, ChatGPT is capable of generating human-like text, which has significantly impacted how information is created, accessed, and used in educational contexts (Baskara & Mukarto, 2023).

ChatGPT is generative language software that predicts the following word or sentence in a text command or conversation using technological means (Fitria, 2023a). ChatGPT is, in essence, a chatbot, which is a computer program designed to resemble a virtual automaton and facilitate conversations resembling those of humans. Despite being in the prototype stage, this dialogue-driven AI chatbot is deemed proficient in automatically responding to genuine human language (Fitria et al., 2023). ChatGPT uses artificial intelligence to respond to user questions and requests with structured and meaningful text. With capabilities similar to human conversation, ChatGPT can be used as a virtual assistant to provide responses, feedback, and information to users. Additionally, responses can be presented in the voice or manner of historical individuals,

as well as in certain rhetorical styles or forms (Kostka & Toncelli, 2023). ChatGPT is an artificial intelligence-powered machine that has been programmed to emulate human discourse through the implementation of Natural Language Processing (NLP) technology (Setiawan & Luthfiyani, 2023). ChatGPT, a robust language model developed by OpenAI, is capable of generating writing that closely resembles human language and can sustain multiple ongoing conversations. As a result, it is a versatile tool that can assist in open education by offering autodidactic students personalized guidance, support, and feedback, thereby boosting their motivation and engagement (Biswas, 2023).

ChatGPT is an artificial intelligence (AI)- based chatbot that has expanded in popularity among users in several fields (Ajlouni et al., 2023). Application ChatGPT has sparked debates in numerous disciplines, including language education (Baradel, 2023). Technological advancements with AI have brought about substantial changes to educational practices in the past decade. Significant attention has been drawn to the development and implementation of Generative Pre-trained Transformers (GPT), specifically ChatGPT, in recent times. Nowadays, teachers and students find a lot of learning media and tools (technology) that can be used to support quality and make it easier to complete work (Wibowo et al., 2023). This cannot be denied because technological progress cannot be separated from human civilization, which always gives rise to many creations, including in terms of learning media. ChatGPT application, which has appeared since mid-2022, has now attracted controversy because it can answer all a person's questions by simply typing a question through the application (Riyadini & Triastuti, 2023).

Despite the growing body of literature on ChatGPT in education, most existing studies remain largely descriptive, focusing on defining the tool and listing its general benefits and challenges. Limited attention has been paid to critical analysis of contradictions in previous findings, contextual factors such as educational level and cultural settings, and the implications of ChatGPT's rapid technological evolution (e.g., transition from earlier versions to GPT-4 and beyond). Furthermore, comparative discussions with similar AI tools and regional variations in adoption remain underexplored. As a result, there is a lack of synthesized insight into how ChatGPT is actually perceived and positioned within real teaching practices, especially from educators' perspectives. Therefore, this study reviews and analyzes existing literature on the use of ChatGPT in EFL teaching by identifying its perceived benefits, challenges, and implementation concerns. Therefore, this study is expected to contribute a critical and contextualized understanding of ChatGPT's role in EFL education and provide insights for educators and researchers navigating the integration of AI-based tools in language teaching.

METHODS

This research employs a library research method, which focuses on collecting, reviewing, and analyzing data from written sources such as books, scholarly articles, and official documents relevant to the research topic. Library research aims to obtain a comprehensive and in-depth understanding of a particular issue by synthesizing existing theories, findings, and scholarly discussions (Mustofa et al., 2023). This method is suitable for studies that examine well-established topics, as it allows researchers to map existing knowledge, identify research gaps, and develop conceptual insights based on previous studies.

Data collection is a crucial stage in research (Rahardjo, 2011). In this study, the documentation technique was used to collect data from selected journal articles and academic publications relevant to the research focus (Ardiansyah et al., 2023). All selected documents were systematically organized and categorized according to research themes. The literature search was conducted using several academic databases. The search employed specific keywords and combinations of terms. Through this process, a total of 32 journal articles were initially identified. After screening titles, abstracts, and full texts based on the predetermined criteria, 18 articles were selected as the primary data sources for analysis. To ensure rigor and relevance, this study applied specific inclusion and exclusion criteria in selecting the literature. The inclusion criteria were: (1) peer-reviewed national and international journal articles, (2) publications that explicitly discuss the implementation, use, benefits, or challenges of ChatGPT or similar generative AI tools in education, particularly in education, and (3) articles published within the last five years (2019–2024) to ensure the relevance and currency of the data.

Data analysis followed the interactive model proposed by Miles et al. (2018), which consists of three interconnected stages. First, data condensation was conducted by identifying, selecting, and summarizing key findings from each source that were directly related to the research objectives. Second, data display involved organizing the condensed data into thematic matrices and narrative descriptions to allow comparison across studies and to identify emerging patterns. Finally, conclusion drawing and verification were carried out by

interpreting the relationships among themes, cross-checking findings across multiple sources, and ensuring the consistency and credibility of interpretations.

FINDINGS

Benefits of ChatGPT in the Teaching and Learning Process

The increasing number and rapid release of ChatGPT have garnered the interest of educators across the globe. Incorporating Chat GPT technology and AI into English as a Foreign Language (EFL) teaching has revolutionized language assessment and learning. The integration of ChatGPT into the teaching and learning process offers a wide range of pedagogical benefits that support both educators and students. The increasing number and rapid release of ChatGPT have garnered the interest of educators across the globe. Incorporating Chat GPT technology and artificial intelligence (AI) into English as a Foreign Language (EFL) teaching has revolutionized language assessment and learning (Amin, 2023). ChatGPT has the potential to function as a proficient instrument for delivering prompt feedback to students and facilitating individualized learning encounters (Xiao & Zhi, 2023). Developing students' lifelong learning skills (e.g., autonomy and evaluative judgment) with the assistance of ChatGPT, offering students personalized guidance, and designing technology-embedded language support are all aspects of future pedagogical practices. Rane (2023) explains that several benefits of ChatGPT are enhanced efficiency and time savings, personalized learning, augmented feedback, mitigation of bias, and access to an abundance of resources. Certain educators are highly optimistic regarding its capacity to facilitate learning (Fütterer et al., 2023). The implementation of artificial intelligence (AI) in the classroom presents new resources that can revolutionize traditional methods of teaching and learning processes (Adiguzel et al., 2023).

Personalized learning

Lou (2023) examines ChatGPT in the preparation of English teaching for teachers. He investigates the impact of ChatGPT on the teaching strategies of teachers, focusing on effectiveness and efficiency. Agustini (2023) explains that by using ChatGPT, students can receive personalized language learning assistance from ChatGPT following their requirements and preferred learning modalities. This facilitates the development of autonomy and a sense of ownership among students as they progress through their language-learning voyage. Jauhiainen & Guerra (2023) indicated that ChatGPT-3.5 can be utilized to personalize educational content to accommodate the knowledge and learning abilities of students with varying degrees of expertise. It is advised that ChatGPT be incorporated into English language programs to encourage students to obtain the drive to learn independently while still being supervised by teachers. Instead of being afraid of the negative effects that ChatGPT may have, it is recommended that teachers demonstrate to their students how they may benefit positively from that platform (Ali et al., 2023). Baskara & Mukarto (2023) consider how ChatGPT could be integrated into language courses and programs in higher education and the potential benefits. For example, ChatGPT could provide personalized language teaching or generate authentic language material for students to engage with.

ChatGPT provides quick responses and feedback.

Salsabila et al. (2024) explain that Chat GPT, a technology based on artificial intelligence, can assist with delivering the required information and answering questions. (Shaikh et al., 2023) indicate that ChatGPT is an effective tool to be used for formal English language learning. The results obtained from the feedback provided by the participants suggest that ChatGPT can generate accurate and coherent responses automatically. The conversation interface of ChatGPT enabled natural writing and interactive dialogues. They identified several constraints associated with ChatGPT as it pertains to the acquisition of new languages and furnished precise suggestions. ChatGPT should supplant human guidance in the process of language acquisition, so it can be utilized in conjunction with human instruction to optimize the development of language learning capabilities. (Rahman & Watanobe, 2023) The emergence of ChatGPT presents educators and students with innovative prospects, such as enhanced accessibility, personalized feedback, interactive discussions, lesson planning, and novel approaches to instructing intricate ideas.

Montenegro-Rueda et al. (2023) highlight ChatGPT as an innovative educational tool with strong potential to enhance learning experiences and student–teacher interaction. When implemented appropriately, it can support pedagogical transformation by motivating students through digital technologies and improving academic performance. Both educators and students perceive ChatGPT positively, particularly for its ability to provide quick responses, learning support, and timely feedback. ChatGPT could enable them to concentrate

on higher-order duties while reducing their burden by responding to routine inquiries (Limna et al., 2023). AI enables individualized language learning by customizing courses to the specific requirements of each student, thereby fostering a more profound comprehension of the target language (Amin, 2023).

Simulating interactive dialog

ChatGPT exhibits a high level of competence in simulating human interactions; users can easily interact with the system to further their education and participate in authentic dialogues with the chatbot (Ghafar, 2023). Students frequently have sincere inquiries, such as the pursuit of inspiration for a particular project. Consequently, an authentic dialogue will encompass all the necessary elements, including the articulation of ideas in summaries, the formulation of follow-up inquiries, the pursuit of explanations, and the provision of information. Learners are allowed to participate in various aspects of language utilization, as opposed to the restricted scope commonly observed in conventional classroom practices. Kartal (2023) provides an analysis of the diverse functionalities of ChatGPT, showcasing its ability to facilitate language learning, produce a wide range of text genres, and simulate interactive dialogues. Both learners and instructors will also find practical strategies for utilizing the functionalities of ChatGPT.

ChatGPT can be used as teaching materials

Lou (2023) demonstrates how ChatGPT can be promptly utilized by English teachers in the design and preparation of their teaching materials. Javaid et al. (2023) explain that educators can modify lessons and teaching materials to the unique needs and abilities of each student. By allowing students to work at their own pace and focus on the areas in which they require the most assistance, the learning environment becomes more effective and efficient. Teachers can potentially optimize their time on various responsibilities through the implementation of this technology. According to Lo (2023), ChatGPT has the potential to assist educators by generating course materials and offering suggestions, as well as facilitating collaboration and answering questions as a virtual tutor. Regarding the English for Specific Purposes (ESP) instructional process, ChatGPT can serve as a time-efficient and effective instrument for evaluating student-written assignments and preparing and executing lesson units (Kovačević, 2023).

Koraishi (2023) explains that ChatGPT offers significant advantages in English as a Foreign Language (EFL) education by supporting material development and assessment processes. It helps educators create contextually relevant and engaging learning resources tailored to students' needs. Additionally, ChatGPT can assist in text evaluation by providing real-time, personalized feedback, thereby enhancing students' learning experiences and overall language development. ChatGPT is a resource and an efficient solution for developing teaching materials. ChatGPT has the potential to enhance the caliber of education if endowed with professionalism and critical thinking. In the implementation of ChatGPT in the educational sector, they are concerned that the convenience offered by ChatGPT may undermine humanism and potentially demotivate teachers and students from exercising critical thinking.

ChatGPT promotes self-reflection and self-evaluation

ChatGPT can stimulate students' introspection regarding their advancements in language learning and foster an environment that motivates them to evaluate their language proficiency. This may encourage students to develop a greater understanding of their strengths and limitations and assume greater accountability for their learning. ChatGPT is capable of providing immediate feedback on the language usage of students, enabling them to rectify mistakes and enhance their proficiency in real time. This can foster student autonomy by permitting them to promptly modify their language usage in response to their errors and gain valuable insights.

Improving students' comprehension of the subject matter

By using ChtaGPT students feel helped in overcoming difficulties or obstacles in understanding lessons. ChatGPT can respond to human questions in the form of text typed into the application (Pontjowulan, 2023). ChatGPT can help overcome difficulties or obstacles in understanding the subject matter, so it can be concluded that students have a positive perception of using ChatGPT as a learning tool in the educational era. ChatGPT can help students understand complex subject matter, help bridge gaps in understanding, and increase learning effectiveness. This application is in great demand by teachers and students because the answers provided are well-structured and can even solve problems in a short time.

Having access to learning materials

Subiyantoro (2023) explains that utilizing AI-powered chatbots in education improves the accessibility of learning materials, provides individualized learning support, and addresses specific challenges in the teaching and learning process. Nevertheless, there are certain disadvantages to consider, such as the possibility

that crucial social interactions between educators and students will be substituted, as well as apprehensions surrounding privacy breaches and the ethical utilization of data. ChatGPT is regarded as a valuable instrument by the study sample to supplement and improve conventional EFL teaching methods (Mohamed, 2023). Students utilize ChatGPT for a greater proportion of their academic tasks, particularly paper-writing assignments. In addition, individuals employ ChatGPT for various purposes, including researching literary theories and biographies of authors, generating creative ideas, translating texts, locating references and thesis themes, and engaging in discussions with the tool (Robbani et al., 2023).

Improving the language learning experience

Hatmanto & Sari (2023) explain that the integration of technology, specifically Chat GPT dialogue, has gained significant prominence in the ever-evolving domain of English language teaching and learning. By providing simulated conversations that resemble those of humans, the application of robust natural language processing methods in ChatGPT may enhance the language-learning experience. These theoretical frameworks are consistent with the ability of ChatGPT to facilitate collaborative learning, student autonomy, knowledge production, authentic language use, and active engagement. Agustini (2023) states that ChatGPT can facilitate language practice, a crucial component for autonomous language acquisition. By engaging in conversations with ChatGPT, students have the opportunity to enhance their language proficiency in a secure and impartial setting. This may encourage students to develop a propensity to take risks in their language learning and increase their confidence in their abilities. Elbanna & Armstrong (2023) explain that this integration would ultimately boost student productivity and efficiency while promoting adaptive learning.

Improving critical thinking and problem-solving abilities

Japoshvili-Ghvinashvili & Suleman (2023) explain that ChatGPT delivers immediate and individualized feedback to learners, enabling them to recognize their strengths and weaknesses and adapt their learning strategies accordingly. Furthermore, ChatGPT can produce instructional videos and learning materials, among other educational content, to facilitate the language and content-based learning of students. Moreover, ChatGPT has the potential to aid students in the development of their critical thinking and problem-solving abilities through the provision of thought-provoking inquiries and prompts that demand information synthesis and analysis. This can facilitate the development of a more profound comprehension of the subject matter and enhance learners' capacity to implement their knowledge in practical situations. Romlah et al. (2023) found that ChatGPT influenced the learning process in students' critical thinking abilities. The use of ChatGPT in the learning process has had an impact in terms of supporting and enriching student learning experiences.

Assisting educators in the teaching and learning process

Mosaiyebzadeh et al. (2023) explain that ChatGPT is a robust large language model that enables educators and students to benefit from task reduction, personalized learning, and lesson planning. ChatGPT has the potential to assist educators in various ways (e.g., generating instructional content, providing suggestions, and acting as an online educator to students through question-answering), facilitating group work, and transforming education via smartphones and IoT devices. ChatGPT has the potential to assist educators in various ways (e.g., generating instructional content, providing suggestions, and acting as an online educator to students through question-answering), facilitating group work, and transforming education via smartphones and IoT devices (Gill et al., 2024). Nguyen (2023) suggests that ChatGPT could assist educators in responsibilities such as grading students' papers and developing educational English materials. ChatGPT facilitates the process for teachers by reducing time constraints and allowing them to accomplish their objectives more efficiently and in a native environment, surpassing the performance of social media applications in the ELT setting (Jahan et al., 2023). Chat GPT is a distinguished social interaction chatbot that substantially improves the ELT environment (Kim et al., 2023).

Harmawan & Makmur (2023) explain that educators view ChatGPT as a work aid. The educator demonstrates a favorable and eager disposition toward the utilization of ChatGPT for educational purposes. ChatGPT provides in terms of lesson preparation and planning, material development, and student insight enhancement. In conclusion, ChatGPT has enormous potential as a learning support system; however, it requires socialization, initial comprehension, and a greater emphasis on the teacher's role in implementation. By utilizing AI-generated assignments, educators can allocate additional time toward providing more personalized instruction, mentorship, and support (Rane, 2023). Rahman & Watanobe (2023) explain that ChatGPT possesses the capacity to serve as a valuable adjunct to research and educational endeavors. ChatGPT possesses a wide range of applications, including but not limited to providing virtual tutoring, language practice, programming instruction, and research support.

Improving students' language skills

ChatGPT facilitates students to improve their English language abilities. This can encourage students to take risks in their language learning and develop confidence in their language skills. ChatGPT can be used in developing students' language skills; scaffolding the learning process by providing feedback to students on their language use and acting as partners in practicing language with recommended activities for more language practice (Bin-Hady et al., 2023). It can be utilized efficiently by students to enhance their language proficiency (Roza & Zulhirawati, 2023). ChatGPT is a pedagogical technology that enables the integration of social interactions. It is capable of transforming how we educate and learn. Students must possess a comprehensive comprehension of ChatGPT to utilize it efficiently for language acquisition. It is critical to possess knowledge regarding the constraints of ChatGPT. It should not be considered a substitute for human instruction or other authoritative resources. Ulla et al. (2023) suggest that the respondents held favorable perceptions of ChatGPT and recognized its wide-ranging utility, which encompassed the development of language activities and the organization of lessons.

Fostering student motivation and engagement

ChatGPT encompasses fostering student motivation, engagement, and self-directed learning via prompt assistance (Alshahrani, 2023). ChatGPT's ability to generate human-like text based on the input it receives makes it a potentially helpful tool for supporting students in their writing practice (Baskara, 2023). Its natural language capabilities can engage and motivate students. According to Salmi & Setiyanti (2023), students are ecstatic and motivated to utilize ChatGPT. Access difficulties and obstacles to student creativity in writing are two indicators, among others, that must be taken into account during the development and implementation of ChatGPT. Positive attitudes have the potential to foster heightened levels of engagement in the learning process (Roza & Zulhirawati, 2023). Positive attitudes toward ChatGPT are linked to increased student engagement. When students see ChatGPT as a helpful learning tool, they are more motivated, persistent, and confident, which supports skill development and achievement of learning goals.

Challenges of ChatGPT in the Teaching and Learning Process

Although ChatGPT offers many benefits for education, its integration also presents challenges for teachers and students.

Having the potential for bias in the output of the generated responses

An obstacle that may arise in using ChatGPT is the possibility of bias in the generated responses. As a consequence of recognizing patterns in the data it is trained on, ChatGPT may generate biased responses. To tackle this issue, it is imperative to detect and rectify bias in the training data, as well as conduct routine bias testing on the model. Kasneci et al. (2023) explain that several challenges of ChatGPT, such as the possibility of bias in the output, the requirement for continual human monitoring, and the possibility of misuse, are also present. However, if managed reasonably, these issues can provide educational situations with possibilities and insights that might help students become familiar with potential social biases, criticalities, and hazards associated with the use of artificial intelligence at an earlier age.

Having the potential to give inaccurate data (reliability and validity of information)

ChatGPT generates text based on data provided to it, but not all of the information it produces is reliable. The important role of educational institutions is to provide students with an understanding of the validity and reliability of information and to develop critical evaluation skills. According to Lo (2023), ChatGPT has the potential to assist educators by generating course materials and offering suggestions, as well as facilitating collaboration and answering questions as a virtual tutor; however, ChatGPT encountered certain difficulties during its implementation, including the generation of inaccurate or fake information. Roza & Zulhirawati (2023) state that ChatGPT has the potential to emit information that is inaccurate or misleading on occasion. Students must approach the information provided by ChatGPT with a critical mindset, capable of discerning any errors or inaccuracies. Gill et al. (2024) also add the risk of generating inaccurate or false data and evading duplicate content (plagiarism) detectors in situations where originality is critical. The frequently documented "hallucinations" associated with GenerativeAI as a whole, which are also pertinent to ChatGPT, may restrict its utility in situations where precision is critical. A stochastic measure that would aid in facilitating sincere and sensitive communication with its users is absent from ChatGPT.

According to Mosaiyebzadeh et al. (2023), ChatGPT has influenced research and education by offering benefits such as reducing workload, supporting personalized learning, and assisting with lesson planning. It can generate instructional content, answer students' questions, facilitate group work, and support learning

through digital platforms. However, its use presents notable limitations, including the risk of producing inaccurate or fabricated information, bypassing plagiarism detection, and generating AI "hallucinations," which reduce reliability in contexts requiring high accuracy. Additionally, ChatGPT lacks mechanisms for ensuring nuanced, sincere, and context-sensitive communication, limiting its effectiveness in critical educational applications.

Having a relation with data privacy

The real-time interaction between users and ChatGPT gives rise to apprehensions regarding privacy matters. Limna et al. (2023) state that the importance of data protection and privacy was addressed as a major concern. They suggest that this may assist policymakers and educators in making well-informed judgments regarding the implementation of ChatGPT in the classroom. Academics are also obligated to consider the implications for students, which may involve the risk of AI oversaturating learning experiences with genuine ones. Ensuring that assignments generated by AI adhere to ethical and educational standards is of the utmost importance.

Having a relation with ethical implications

Ethical concerns are brought to the forefront by the integration of AI and ChatGPT regarding privacy, equity, and responsible AI utilization (Amin, 2023). The real-time interaction between users and ChatGPT gives rise to apprehensions regarding ethical matters. It is crucial to develop ethical guidelines and implement stringent data privacy and security measures to address these concerns regarding the educational use of ChatGPT. Yu (2023) explains that ChatGPT has engendered ethical dilemmas and legal vulnerabilities. Academic plagiarism and other forms of intellectual larceny can result in severe repercussions for academic integrity. To address the risks, developers should strengthen AI self-regulation, while educators must critically assess the ethical implications of AI-generated work and ensure its use aligns with pedagogical goals and supports students' cognitive development (Rane, 2023).

Having the potential to replace/substitute a teacher's role

The role of the lecturer in providing contextual understanding, encouraging critical thinking, and providing valuable feedback should not be replaced by ChatGPT. It is important to maintain human-to-human interaction in the learning process. The use of ChatGPT must complement the lecturer's role, not replace it. Baskara & Mukarto (2023) consider challenges of ChatGPT in language learning may also raise concerns about the potential substitution of human language teachers for using a machine learning system to generate text. Even though ChatGPT is a sophisticated tool, its function cannot replace the role of a teacher in educating students. The role of teachers in forming character and instilling Islamic values cannot be replaced by any sophisticated tools (Fitria, 2023b). Teachers still have an important role in providing in-depth instruction, supporting students, and understanding each individual's needs.

Having the potential for plagiarism

Mosaiyebzadeh et al. (2023) explain that since ChatGPT generates text that resembles human text, it can be challenging to detect deception, and several obstacles, including the possibility of assignment and exam plagiarism, which jeopardize the problem-solving abilities of students. Song & Song (2023) note that the use of ChatGPT in academic writing poses risks of unintended plagiarism and academic dishonesty if not carefully monitored. Although guidelines can encourage ethical and supplementary use, the nature of AI-generated content may still challenge originality, critical thinking, and integrity within traditional education and research systems. (Rahman & Watanobe, 2023). Alternative factors are contributing to the deterioration of analytical, critical, and creative thinking. To reduce the potential negative effects of Chat GPT use in ELT, it is crucial to increase students' awareness regarding its application in learning activities (Irzawati et al., 2024). Özdemir-Çağatay (2023) highlights plagiarism, content quality, and ethics related to ChatGPT, with some questioning its reliability without human validation. The worries are about the potential stifling of students' creativity and critical thinking.

Having dependence and overreliance on technology

Hong (2023) is concerned about the potential for an overreliance on technology. These encompass concerns regarding the possibility of excessive dependence (Kartal, 2023). Navigating the hybrid digital landscape emphasizes the need for teachers and students to possess critical digital competence and the significance of a principled approach to the integration of such technologies into pedagogical practices.

DISCUSSION

The introduction of ChatGPT into the educational field brings both pedagogical potential and complex challenges that require contextual and critical consideration rather than purely descriptive adoption. Although many studies published in 2023 highlight the initial implementation of ChatGPT in educational contexts, it is important to acknowledge the rapid evolution of this technology, particularly with the release of more advanced models such as GPT-4 and subsequent iterations. These newer models demonstrate improved contextual understanding, multimodal capabilities, and enhanced response accuracy, which may partially address earlier concerns related to superficial answers and factual inaccuracies reported in early ChatGPT studies. However, despite these technical improvements, fundamental pedagogical and ethical challenges—such as academic integrity, learner dependency, and bias—remain persistent, indicating that technological advancement alone does not automatically resolve educational concerns.

The rapid development of ChatGPT has attracted widespread attention from educators, particularly in the field of EFL. Its integration into teaching and learning processes offers several benefits, including rapid feedback, flexible learning pathways, and personalized instructional support. ChatGPT can assist students in areas such as writing, grammar practice, and idea generation, while also supporting learner autonomy, self-regulation, and lifelong learning skills. Additionally, it helps improve efficiency, saves time, reduces teacher workload, and provides access to a wide range of learning resources, making it a valuable supportive tool in education. However, the use of ChatGPT also presents notable challenges, such as concerns about academic integrity, accuracy of responses, cultural bias, limited authentic interaction, and overreliance on technology. These issues highlight the importance of using ChatGPT thoughtfully and responsibly. Rather than replacing teachers or critical thinking processes, ChatGPT should be positioned as a supplementary learning aid that supports instruction and enhances learning outcomes when guided appropriately by educators.

Cultural and contextual factors further complicate ChatGPT adoption. Huallpa (2023) emphasizes that cultural norms, personal beliefs, and ethical considerations influence how educators and students perceive and use AI technologies. In some educational contexts—particularly in collectivist cultures or examination-oriented systems—ChatGPT may be viewed with suspicion due to concerns over cheating, moral values, or reduced teacher authority. Conversely, in technology-rich and learner-centered environments, ChatGPT is more readily embraced as a supplementary learning tool.

In addition to ChatGPT, other AI-powered tools such as Grammarly, QuillBot, DeepL, and automated writing evaluation systems are also widely used in language education. Unlike ChatGPT, these tools often focus on specific functions (e.g., grammar correction or paraphrasing) rather than open-ended dialogue. While ChatGPT offers broader conversational and generative capabilities, it also poses higher risks related to plagiarism and uncritical content acceptance. Therefore, a comparative perspective suggests that ChatGPT's effectiveness depends largely on instructional design, task type, and pedagogical control, rather than on technological sophistication alone.

The literature also reveals uneven adoption of ChatGPT across regions. In developed educational systems with strong digital infrastructure, ChatGPT is often integrated into blended or online learning environments. In contrast, in developing regions, challenges such as limited internet access, insufficient technological infrastructure, and a lack of teacher training constrain effective implementation. These disparities highlight the need for context-sensitive implementation strategies that consider institutional readiness, resource availability, and cultural expectations. Several studies emphasize that successful ChatGPT integration requires not only technical access but also digital literacy, ethical guidelines, and pedagogical scaffolding. While ChatGPT can enhance student productivity and adaptive learning, limitations such as factual inaccuracies, embedded biases, and safety concerns necessitate critical supervision. Therefore, educators must design learning activities that promote reflection, critical evaluation, and responsible AI use rather than passive consumption of AI-generated content.

The use of ChatGPT in education offers significant potential but also presents notable challenges, making strategic and ethical integration essential. While ChatGPT can support learning through personalized assistance, assignment evaluation, feedback provision, and guidance, its limitations—such as response inaccuracies, ethical concerns, bias, and the risk of diminishing educators' roles—require careful consideration. The effectiveness of ChatGPT largely depends on users' understanding and approach; students who critically evaluate AI-generated content tend to benefit more, whereas uncritical reliance may lead to lower-quality outcomes. Therefore, ChatGPT should be positioned as a supplementary learning aid rather than a substitute for critical thinking, independent learning, or meaningful human interaction.

To optimize its benefits, educational institutions should integrate ChatGPT into learning environments with strong lecturer involvement, provide training for students and teachers on ethical and responsible use, and establish clear institutional policies to uphold academic integrity. Adapting curricula to the digital age, fostering collaboration and discussion, and continuously monitoring technological developments are also crucial. Through guided implementation, ongoing evaluation, and a human-centered pedagogical approach, ChatGPT can enhance teaching and learning experiences while minimizing potential risks.

Due to the rapid growth of artificial intelligence (AI), educators need to stay updated on current trends, challenges, and opportunities in AI. This knowledge enables them to incorporate AI developments into their teaching methods. Faiz & Kurniawaty (2023) highlight the importance of educators instilling moral and ethical values through habituation and fostering an academic culture based on these values. While ChatGPT can offer convenience, it cannot replace the emotional and social interaction between students and educators, as direct communication is vital for learning. Ethical and moral considerations are necessary when using ChatGPT to ensure that users critically assess the benefits and potential consequences of relying on technology in academic contexts. ChatGPT, when guided by principles of pluralism, equity, and social justice, has the potential to enhance language learning through engaged dialogue, learner-generated knowledge, and differentiated explanations. However, it is crucial to prevent issues like cultural bias, decontextualization, and disempowerment that could worsen inequalities. Educators should integrate ChatGPT into learning in a way that complements, rather than replaces, social interaction and student participation. By carefully considering both the benefits and risks, ChatGPT can significantly enhance higher education.

While this study does not present empirical data, it offers a conceptual contribution by synthesizing existing literature into a structured thematic framework that highlights the interconnected relationship between pedagogical benefits, ethical concerns, and instructional challenges of ChatGPT in English language learning. Although several studies report positive impacts of ChatGPT on learner engagement, other studies caution against overreliance on AI due to issues of academic integrity and reduced cognitive effort. This inconsistency suggests that the effectiveness of ChatGPT is highly dependent on instructional design and teacher mediation, an aspect that is often underexplored in previous research.

CONCLUSIONS

ChatGPT is a natural language–based AI system developed by OpenAI that functions as a virtual assistant capable of generating structured, human-like responses. In educational contexts, it offers notable benefits such as personalized learning, rapid feedback, interactive dialogue, and the enhancement of language skills, critical thinking, and student motivation. However, its implementation also raises concerns related to bias, inaccuracies, ethical and privacy issues, plagiarism, and overreliance on technology. Therefore, the integration of ChatGPT in education must be strategic and carefully managed. Educators should play a central role in guiding its use to support learning without replacing meaningful interaction and student participation. Educational institutions are encouraged to promote ethical use, establish clear usage policies, adapt curricula to the digital age, and foster critical evaluation skills.

Further empirical research, including case studies and interviews, is needed to gain deeper insights into the effective and responsible use of ChatGPT in teaching and learning. This study contributes theoretically by offering a synthesized framework of ChatGPT implementation in English language education, categorizing benefits and challenges into pedagogical, ethical, and instructional dimensions. Practically, the findings provide insights into educators and policymakers on how to integrate ChatGPT responsibly and effectively in language learning contexts.

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