

Research Article

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Author for correspondence:

Surattana Adipat

✉ ajsurattana@gmail.com

✉ Ramkhamhaeng University, Thailand

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Challenging Conventions: ChatGPT's Controversial Impacts on Educational and English Language Teaching Practices

Surattana Adipat 

Abstract

Background/purpose. The study examined the potential benefits and concerns of implementing ChatGPT, an advanced tool of artificial intelligence technology, in the realm of teaching and learning.

Materials/methods. A systematic review was conducted, detailing the processes of inclusion and exclusion criteria, selection, data extraction, and analysis to synthesize existing research findings.

Results. The integration of ChatGPT into education presents opportunities and challenges, especially in English Language Teaching. It provides benefits such as improved writing support, personalized learning experiences, improved language skills through real-time feedback, and efficient teaching tools that promote engagement and tailored instruction. However, challenges such as data privacy, academic integrity, ethical concerns, limitations in proficiency assessment, and over-dependence on technology must be addressed. To fully utilize the capabilities of ChatGPT, preserve academic integrity, and ensure independent learning, innovation, and legal and ethical safeguards must be balanced.

Conclusion. ChatGPT presents transformational opportunities for enhancing educational outcomes, particularly in ELT, by offering innovative and adaptive learning solutions. However, careful implementation strategies are required to address ethical and legal concerns and to ensure its responsible use in educational settings.

1. Introduction

The evolution of artificial intelligence (AI) has enhanced development in the transformation of education systems, resulting in the empowerment and engagement of educators, students, and administrators. After distance learning and online teaching became significant aspects of higher education, AI was increasingly incorporated into educational systems. After the concept of artificial intelligence was first established in 1956, significant progress has been made in modern society, which has significantly impacted services provided in higher education institutions. AI started being used for educational purposes in the early 1980s, enabling students who were directly exposed to teaching by teachers and AI to improve their performance compared with those who did not (Hao, 2019). AI would have major impacts on education since advancements in information technology call for new ways to help institutions adapt to the ever-changing technological environment (Ocaña-Fernández et al., 2019). In addition, due to the mass adoption of technology in society, the continued progress of AI technology is bound to have a more significant impact on education than any other technological development (Bates et al., 2020).

The use of AI has globally influenced several fields, with education being one of the affected fields and reshaping teaching and learning processes across disciplines. AI's evolution from rule-based systems to the innovation of modern machine learning with the ChatGPT innovative development reshapes and personalizes adaptive learning environments, primarily to enhance the learning experience and academic performance (Smith, 2021). In Thailand, the importance of English has been recognized, making it a mandatory subject for all tiers of education. The goal of Thailand's curriculum is to increase student interest in language, foster a good attitude toward English, and improve student communication abilities in English (Vibulphol, 2004). Additionally, being a member of the ASEAN Economic Community (AEC) in 2015, the English language has been made a focus and subject to various priorities and has become a requirement for meaningful interactions in various situations (Chinwonno, 2001). It is essential for students to have good English communication skills because it allows them to share information, insights, and opinions with others while preparing them for the professional world. Despite that, the results of the Ordinary National Educational Test (O-NET) administered by the National Institute of Educational Testing Service (NIETS) show that their average scores for English were still below the standard level (Mala, 2019). Additionally, although Thai students study English at primary and secondary schools for twelve years, the outcomes are dubious (Noom-ura, 2013). With the potential of ChatGPT, there could be longstanding challenges in English language teaching (ELT) as it provides language learning applications that adapt to the real world and current events of education so teachers and students can enhance their English skills and make the online learning experience tailored for each learner (Ghareeb Ahmed Ali, 2020).

This study aims to thoroughly investigate the role of ChatGPT in education, particularly in English language teaching (ELT). By examining both the opportunities and challenges associated with its use, the study proposes recommendations that would serve as a basis for the possible implementation of ChatGPT in learning and teaching environments while highlighting the need to overcome ethical and legal concerns. Therefore, the intended goal of this study is to provide a balanced perspective that harnesses the benefits of AI-driven educational tools while preserving the integrity, essence, and equity of the learning process in a way that aligns with ethical and legal standards. For this purpose, the study examines how ChatGPT can be used in English Language Teaching (ELT), rates the feasibility of their application in line with constructivist educational traditions, and considers practical concerns such as ethical matters, content reliability, and privacy of the data. AI integration in education, therefore, must be kept supportive and responsible.

2. Literature Review

ChatGPT, an AI-powered chatbot system, is based on Generative Pre-trained Transformer (GPT) architecture to process and create content through deep learning models from provided prompts. It has gained enormous popularity within the educational sector, and its implementation in English Language Teaching (ELT) became widespread after its release to the public in 2022 because of advances in artificial intelligence (AI) and natural language processing (NLP) technology (De Angelis et al., 2023). There are several crucial advantages coming from the adaptive nature and writing-generation abilities that ChatGPT provides across differing language environments. The current analysis of how ChatGPT affects language learning holds essential significance because it reveals important developments in technology-supported language education (Mabuan, 2024).

Through text-based communication and extensive knowledge databases, ChatGPT helps diverse academic groups and supports students, teachers, and other staff during their academic endeavors. Under constructivist learning principles, contrary to traditional teaching, students build new knowledge through active thinking when they use the environment to connect previously known information and newly acquired information that they further evaluate and compare to what they already know. Constructivist principles advocate students attain knowledge by actively participating in the learning process rather than merely receiving educational materials from their teachers (Hmelo-Silver & Eberbach, 2018; Marsh et al., 2019). By providing real-time feedback and adaptive learning experiences, ChatGPT supports students in connecting prior knowledge with new information, promoting deeper understanding and critical thinking (Luckin et al., 2016; Marsh et al., 2019).

It is undeniable that ChatGPT, as a powerful natural language processing tool, brings significant benefits to improve today's educational system. When educational institutions use ChatGPT, students experience better learning freedom while teachers' workload is reduced. The new technology also connects their teams better to strengthen workplace relationships. ChatGPT serves many parties at school, including student support and skill development alongside administrative and curriculum development benefits for better operational efficiency.

While ChatGPT might bring potential benefits to the implementation in the educational environment, some serious ethical and legal issues have emerged. The system employs AI to search and validate information in massive sets of data stored in global databases, leading to several important concerns, including data privacy, the kind of data the system collects and uses, biases in AI, accuracy of the responses, data security vulnerabilities, or the influences of AI responses on decision-making on different matters. In terms of ethical, legal, and intellectual perspectives, one must be very careful around the issue of data ownership and accountability for any actions taken by AI.

Nevertheless, no system or process is without its flaws. Because the inclusion of AI does bring so many potential benefits, there are major issues of ethical validity; data privacy and bias within AI-generated content in educational contexts. Additionally, students use AI's text generation capability for their assignments increasing the tendency of academic dishonesty when students submit AI generated work as their own work. Consequently, assessments and evaluations would be affected, influencing students' future ability to improve their knowledge and skills.

3. Methodology

3.1. Study Design

This study employed a comprehensive and systematic search strategy to identify relevant studies examining the topic of the use of ChatGPT in education and English language teaching, with the search keywords related to ChatGPT, education, and English language teaching. The search was

conducted using electronic databases, including Scopus, ERIC, PubMed, and ScienceDirect, in addition to other reliable official government websites related to technology, innovation, AI, ChatGPT, and laws, with data from 2020 to 2024.

3.2. Inclusion and Exclusion Criteria

For the systematic review, studies were included if they met the following criteria: Articles must be peer-reviewed and published between 2020 and 2024, involve teachers, educators, students, or educational institutions, and focus on the general use of AI, laws and regulations related to AI, AI and ChatGPT integration in education, and AI and ChatGPT integration in teaching English, detailing both positive and negative outcomes. Additionally, articles had to be published in full in English without significant grammatical errors that could obscure meaning or bring questions to the accuracy of the information.

Studies were excluded if they were not peer-reviewed, lacked clear objectives, methods, or reliable and unbiased findings, were translated into English with numerous grammatical errors, or contained content that was substantially similar to another article in a different journal, posing a risk of plagiarism. This ensured the review maintained a high level of academic integrity by focusing on good quality and relevant literature.

3.3. Selection Process

The researcher manually organized records by cataloging the data based on primary information such as focus areas or main content, publication year, and author. All records were prioritized based on the outline of the manuscript, allowing for efficient management and retrieval of documents. Upon preliminary review, 27 of 78 studies were excluded as the researcher ensured a meticulous review of all materials relevant to the specific themes of AI and ChatGPT in education or English language teaching and removed all duplicates through an analytical and thorough comparison process to ensure accuracy and reliability. This exclusion left 51 studies for the second round of reviews, during which 13 studies were excluded for reasons such as lack of clear objectives, insufficient methodological detail, or significant grammatical issues that could impact the integrity of the data presented. Consequently, 38 studies were selected for in-depth analysis in the final stage of the review. After storing the list of selected records, the researcher consulted with an expert in ELT to review them before proceeding with the main study. If any disagreements between reviewers arose, they were resolved through discussion or consultation with a third reviewer.

3.4. Data Extraction and Analysis

A data extraction form was developed to collect relevant information from each included study. Extracted data included studies in the last ten years. There are many advanced artificial intelligence and machine learning technologies, including natural language processing, and ChatGPT has become widespread within the last ten years. Therefore, sources within this ten-year timeframe are likely to adequately provide valuable information about the current situation regarding the opportunities, problems, and ethical issues related to applying AI and ChatGPT technologies. The growing concern regarding ethical, legal, and societal issues—especially on privacy, bias, and data security such as GDPR and FERPA—also reinforces the need to have the latest information. The studies presented here are limited to those that investigate the use of AI and ChatGPT in educational systems in the form of organization reports, review articles, research articles, and books from the past five years since this provides the most up-to-date evidence of their applicability and impact. The continual increase of AI research in education in general and ChatGPT in ELT shows the significance of citing recent research to ensure that a given work reflects contemporary advancements of knowledge and discussions in the field. In addition, the selected studies present both positive and negative findings of the use of AI and ChatGPT.

Several precautions were taken to reduce bias and increase the quality of the included studies. First, an effort was made to check whether the information listed could still be found on the official government web resources with clearly indicated dates, ensuring that the links were still active. Additionally, all articles with DOI links from journals were checked to ensure they were accessible and linked to the correct articles. Finally, the quality assessment was conducted independently by an expert in the field of technology and English language teaching; any issues and differences encountered were resolved through discussion, and a decision was made to reach a consensus.

3.5. Data Analysis

The narrative synthesis of the findings focused on two primary themes: 1) ethical and legal considerations in the integration of ChatGPT in education and 2) the specific opportunities and challenges presented in ELT. Within these themes, the analysis identified four key opportunities to improve learning outcomes and four significant concerns that must be addressed to ensure the effective and responsible use of AI in education. Data regarding both the advantages of using ChatGPT in education and the potential risks of its implementation provide an outline of the advantages and limitations of further applications of ChatGPT and contribute to recommendations for how it can be successfully applied in educational practice to avoid certain risks.

4. Results

4.1. Ethical and Legal Considerations in the Integration of ChatGPT in Education

The integration of ChatGPT in educational systems and frameworks entails grappling with a number of theories, concepts, and laws that define the ethical and legal discourses about AI for learning, which demands close scrutiny. A range of issues are recognized as emerging, one of which is safeguarding data privacy. Since ChatGPT analyses and stores data from interactions with students and staff, it is necessary to ensure that personal and academic data are processed safely. Requirements for the protection of personal data are outlined in legal acts, including the General Data Protection Regulation (GDPR) in the European Union or the Family Educational Rights and Privacy Act (FERPA) in the United States of America, which are crucial to preserve the confidentiality and integrity of information at the highest levels (European Parliament, 2020; United States Congress, 2023; United States Department of Education, 2021).

Similar to sample bias, bias in data entails gender, race, or cultural prejudice that results in ethical risks and is considered to be a source of discrimination risk (Chen, 2023). Hence, it is necessary to explore preventive measures to detect and address training data bias to achieve fair use of AI in educational engagements and promote equity in learning. Equity issues are important since future AI systems, such as ChatGPT, should not have attributes that will favor or disfavor education for certain groups of people. It is necessary to continually seek to eliminate such biases for equality in learning (Page et al., 2021; Zhang et al., 2021). For instance, biases in ChatGPT's language generation could influence the fairness and equity of its responses, potentially disadvantaging learners from underrepresented groups.

Concerns about academic integrity increase when students misuse ChatGPT to complete assignments, leading to an increased risk of plagiarism and academic dishonesty. According to Desaire et al.'s (2023) study, such a reliance on AI-generated content undermines critical thinking and creativity, since educators claim that it would affect learning outcomes. These risks show the importance of strong plagiarism detection methods and strict ethical rules around the usage of AI in educational settings to reduce them and encourage the judicious use of AI in education.

Moreover, the legal implications of decisions made and led by AI in courses, in addition to administrative tasks, add certain levels of ambiguity in terms of who is liable for what. Perhaps the most problematic legal question related to AI advice is how to identify culpable parties once

something goes wrong. Legal concerns regarding strict liability and negligence must be addressed. It is necessary to determine who is effectively responsible for practices that are based on AI, which is an issue related to the ethical nature and the transparency of the use of AI.

Issues of ownership and intellectual property rights are also relevant, especially when ChatGPT is employed to develop new and exclusive education materials or works of art. The rights of ownership and distribution of such content must also be made clear to avoid disputes that arise. When it comes to the exclusive rights related to intellectual property and AI-created content such as educational materials, it is important to focus on copyright and ownership rights (Smith & Johnson, 2022; United States Copyright Office, 2022).

Informed consent is another crucial element, and students and staff must be fully aware of their relationship with an AI system and the use of their data to enhance technological affordances in many sectors. It is important to maintain regulatory bounds regarding informed consent to avoid intruding on the privacy rights of students (Akgun & Greenhow, 2022; Huang, 2003). While informed consent has been the regulatory focus for decades, it is also critical to consider the downstream implications of enacting such a requirement in environments with uneven digital literacy. It cannot be assumed that all users fully understand and agree to the terms, which may disregard vulnerable students in under-resourced settings. This raises important questions regarding how equitable implementation across diverse educational contexts can be achieved.

In addition to informed consent, the roles and responsibilities of AI developers, educational institutions, and end-users' infringements in judgments surrounding the application of AI in education such as unfair grading, accessibility and equity, require that a precise line of accountability is drawn. Implementing laws can help define these duties and obligations to ensure all concerned people are held responsible (Nguyen et al., 2023).

AI-generated recommendations can be easy to manipulate, so individuals must understand why and how an AI came up with certain recommendations for trust and accountability (Smith & Johnson, 2022). The practical considerations of the legal and ethical issues discussed in this paper on ChatGPT usage in education, therefore, highlight the importance of elaborate strategies to effectively capture the potential of AI technologies while also respecting human rights and the law. It is imperative to confront these issues to achieve the proper utilization of AI tools in educational processes and to minimize possible dangers (Nguyen et al., 2023).

In fact, diffusing AI technologies such as ChatGPT in teaching-learning processes does not just concern integrating commercial off-the-shelf products in education but also recognizing the ethicality and legal issues due to the advances of the technology, which can be prepared as custom-built for particular needs. From this broad perspective for different stakeholders, it is necessary to take a more mindful approach to the many factors and thus call for a more thorough understanding of the complexity of possible interests and risks.

4.2. Integrating AI Technologies in English Language Teaching: Opportunities, Challenges, and Ethical Considerations

With a foundational understanding of AI integration in general educational settings, it is important to consider the specific aspects of AI technologies, particularly ChatGPT, in the field of ELT. The integration of ChatGPT in ELT offers significant opportunities, particularly in alignment with the theory of constructivism, emphasizing the development of instructional methods that promote students' construction of knowledge, personalized learning experiences, and language proficiency outcomes through active engagement in direct, interactive learning experiences (Hmelo-Silver & Eberbach, 2018; Marsh et al., 2019; Wakil et al., 2019).

However, the achievement of this technological transition aiming to improve effectiveness and inclusiveness of those involved in the language learning process requires consideration of the following factors.

1) *Ethical considerations*: Ensure appropriate utilization of ChatGPT with regards to data privacy, content bias, and academic integrity (Floridi et al., 2018).

2) *Pedagogical practices*: Use ChatGPT in instruction planning and delivery so that it serves as an instructional aid toward improved instruction rather than being used in the place of human teachers (Luckin et al., 2016).

3) *Technological literacy*: Conduct training for teachers and students and prepare adequate resources to use ChatGPT (Williamson & Eynon, 2020).

Taking these factors and others into account, the use of ChatGPT in ELT can be proposed to have several crucial opportunities for improving learning outcomes. The following four broad learning advancements can be enhanced through the use of ChatGPT in the classroom.

1) *Enhanced writing support*

ChatGPT, among other AI tools, demonstrates that it can provide students with a higher level of skill improvement, particularly in writing. ChatGPT can help writers correct their language usage, grammar, and coherence. According to Mabuan (2024), advanced language technologies used in machine translation and chatbots struggle with handling syntactic and subtle semantic features of language. Its assistance in evaluating students' written work to determine common mistakes and provide precise corrections, giving further instructions to improve the grammatical structure of the original text, and different suggestions well adapted to the user's proficiency level and requirements is beneficial.

Additionally, Escalante et al. (2023) suggest that ChatGPT-generated feedback provides the necessary push to enable students to employ cohesion and coherence effectively in their writing. ChatGPT's competency to understand and appreciate given written texts provides it with an option to suggest points for improving the overall structure of a text in terms of coherence and clarity. The chatbot assists learners in identifying ways to form their thoughts in a manner that is both logically and effectively put together based on the demands of the English language (Kostka & Toncelli, 2023).

Overall, ChatGPT's ability to cover all parts of writing assistance and adapt writing suggestions to learners' personal needs basically raises the level of learning for those who study English as a foreign language. ChatGPT can give results specific to language usage, grammar, coherence, etc., which allows students to develop their writing competency step by step. In other words, these two features of a ChatGPT emphasize its role as an important tool for the ELT class, which will help the students learn and practice as individuals.

2) *Personalized learning*

ChatGPT's flexible nature is evidence that learning ELT has entered the era of personalized learning, which means the way students of ELT learn is significantly transformed. ChatGPT has sophisticated language features such as contextual understanding, advanced natural language processing (NLP), and adaptive feedback mechanisms, amongst others. For instance, ChatGPT uses contextual understanding to interpret user input accurately and determine, based on linguistics, to respond in a certain way. Additionally, NLP understands and works through the form and function of language elements, while adaptive feedback mechanisms improve the pace and quality of language learning by providing students with feedback matching their needs and abilities (Gligorea et al., 2023). These features produce personalized responses that are beneficial for individual students with different levels of language proficiency, preferences, and learning needs. (Pérez-Núñez, 2023).

In line with the constructivist emphasis on individualized learning fostering a more personalized and effective learning experience, ChatGPT's adjustment to the individual student's needs and guidance for students to develop at a personal pace on their own initiates improvement. This individualized process brings drastic changes to the common acquisition process, where people are taught the target language from books. It can also be described as a personalized learning journey. ChatGPT's method of adapting to different students' proficiency levels ensures that students receive materials and exercises accordingly (Mohamed, 2023). Novices to ChatGPT might find that it provides general explanations and easy vocabulary, but it has some complexity. As students gain knowledge of the target language, the complexity increases. In contrast, the advanced learning process is not likely to be interrupted by these students as they will be introduced to more advanced language structures and tasks of varying levels of difficulty, ensuring that learning will remain or continue to be both challenging and engaging (Pérez-Núñez, 2023).

Furthermore, ChatGPT's individualized replies provoke students' enthusiasm in the learning environment, which subsequently increases motivation. Through its customized approach, ChatGPT encourages students to be part of their learning and fosters a sense of learning community. Therefore, students can take charge of their learning experiences. Pérez-Núñez (2023) sees such an environment as the foremost factor of success in ELT since it not only increases students' belief in themselves but also enhances their academic performance. The power of adaptability that ChatGPT offers does not end with personalized education but also extends to facilitating diverse learning styles and accommodating students from different cultural backgrounds (Kılınç, 2023). By using examples from diverse cultures and adjusting learning styles to different students, ChatGPT provides instructions that are easily understandable and applicable to all students, regardless of their backgrounds.

In general, the adaptation of ChatGPT demonstrates its potential to innovate to produce student-centered curricula or learning processes. As it helps build a learning environment and engages with every student's individual difference, ChatGPT can help students be committed and successful in their academic journey, which qualifies as a huge plus in language education.

3) Supplementary tool for teachers

In ELT, ChatGPT has great utility as an effective supplemental tool that helps teachers quickly communicate with their students, produce learning materials, and also provide targeted feedback in a timely manner (Punar Özçelik & Yangın Ekşi, 2024). ChatGPT's ability to produce language according to humans' specifications helps facilitate teachers in quickly and effectively providing individualized feedback on students' written assignments. This ensures that students receive feedback on their work quickly, often through peer review and group work, so that when they receive their work back, they can focus on their performance.

Not only does ChatGPT provide students with some learning activity scaffolding and partial assistance, but it also allows students to gradually improve their performance on their own. In addition, it supports student learning by providing help, commentary, and model answers, which could lead students to acquire skills to become independent students (Punar Özçelik & Yangın Ekşi, 2024). Furthermore, teachers commonly use ChatGPT for several purposes, such as rubric-building, curriculum designing, and the creation of instructional videos (Ulla et al., 2023). ChatGPT helps teachers gather constructive materials for their lessons—providing students with carefully drafted lesson plans and worksheets, as well as quiz content that aligns with their objectives. It later accelerates the instructional design process and spares teachers' faculty development to devote more time and effort to research if they need to. Furthermore, the variety of materials generated by ChatGPT so far increases the capability of delivering effective courses irrespective of specifications or

circumstances (Ulla et al., 2023). Instructors switch between levels, accommodate learning styles, and connect classroom contexts to enhance the teaching so that students stay alert and interactive.

Overall ChatGPT is a tool with a supplementary role for English language teaching (ELT) instructors. It aids in the provision of grading, facilitates class scaffolding as well, and speeds up the development of learning instructional materials. Using Chat GPT, which has a wide range of features, such as enhanced efficiency of teaching, getting students engaged in class activities, and creation of a lively and interactive learning environment, is getting a lot easier for teachers instead.

4) Improvement in English listening skills

Xing's (2023) study aims to revolutionize the induction of Convolutional Neural Networks (CNNs) and integrate the ChatGPT tool to upgrade English listening education. This method particularly leans on ChatGPT's language generation capacities to create realistic listening exercises that closely mirror natural dialogues, which, as a result, deeply contribute to students' efficient listening comprehension skills. As ChatGPT can be used to create different listening materials, such as listening to speak and different accents, speech patterns, and sentences, the educator can teach the students the list of materials that they have to listen to. The language represented in such materials mimic real-life scenarios, so students are exposed to varying linguistic inputs which enhances their comprehension of spoken English in varied situations.

Furthermore, integrating a CNN into a listening process enhances the experience with videos and contextual assistance, and it also provides a more immersive listening experience, making the listener feel as if they are part of the entire process (Xing, 2023). Teachers may enhance their lessons by using audio-visual materials, such as images or video, together to form a perceptual environment, which activates all the senses and supports students to better comprehend and recall the language content.

Additionally, the ChatGPT-driven listening tasks expected provision of learning activities within which the students can actively engage is another feature of the technology. By means of interactive dialogue simulations, tutors and their students are allowed to be actively involved in the material, which strengthens their understanding of the main idea as well as their mastery of the language. Furthermore, according to Xing (2023), this strategy is scalable and adaptable, allowing teachers to tailor the training to match each student's level of language proficiency. The scope of ChatGPT-based exercises can range from covering elementary listening comprehension and grammatical accuracy topics to addressing more advanced language proficiency areas of instruction. The activities allow for considerable flexibility and can be tailored to meet a variety of objectives and needs.

Although ChatGPT facilitates several aforementioned advantages, there are also significant concerns that need to be addressed as follows:

1) Concerns regarding trustworthiness and authenticity

Trustworthiness and authenticity are two critical concerns when integrating ChatGPT into second language education as it calls into question the credibility of its content, with reliability and accuracy of the information remaining major concerns. The first issue that this technology presents is the problem of making differentiation between human writing and AI writing in the second language educational environment in which it operates (Alexander et al., 2023). This situation is not only unfair and unethical but also deters the education philosophy of developing original, fresh ideas and raising problems for educators. The ramifications of the students transgressing ChatGPT boundaries and losing the lessons' authenticity are associated with the existing problems related to authenticity. According to Alexander et al. (2023), students may overly use the written avenue as a source of information, thus becoming intellectually lazy and hindering their skills in critical thinking and language production. Overriding always praised AI-powered tools can result in a passive learning

tendency of the students, where they will escape from meaningful language concentration and reproduction to prioritize efficiency.

Additionally, this may produce a negative effect on knowing the difference between AI-generated and human writing, which affects the process of assessment and evaluation in language education. Education professionals have the very tough job of separating between unique student papers and content helped with generative AI that became a challenge for evaluation purposes and brought to the surface the question of the authenticity and fairness of grading assessments. Easing is unavoidable at this stage in the important assessments where the exactness of the student's proficiency in the language is uppermost in mind.

More importantly, the most likely increase in AI-generated content possesses the potential to deter the maintenance of educational integrity. The fact that the students are able to access and replicate text produced by ChatGPT merely increases the extent of plagiarism and, therefore, compromises the rights of property relating to intellectual property. Lazy students use AI generators and may intentionally or unintentionally misrepresent the work as their meaning, academic integrity, and scholarly ethics of honesty no longer be the truth. Marzuki et al. (2023) focus on the AI writing tools that have ChatGPT as part of them and eventually put their spotlight on students' writing style and structure from the viewpoint of EFL teachers. They raise concerns regarding the possibility of uniformity of styles of writing and loss that can unfold in student texts when they are produced with the help of artificial intelligence tools.

2) Ethical considerations

The embrace of ChatGPT for English language teaching has raised a number of ethical questions, including those on academic integrity (Cong-Lem et al., 2023). Vietnamese EFL teachers' perceptions reflect the struggles they face due to the emergence of generative AI technologies, such as ChatGPT and their competence in neutralizing their influence on maintaining academic standards. Among the others, the main ethical challenge is related to the possible misappropriation of ChatGPT by students to develop plagiarism or avoid academic requirements. AI-powered ChatGPT's ability to produce texts of high quality and with contextual relevance may tempt students to lie and substitute writing that is generated by the computer instead of the original work. For those assistants who strictly focus on the information gathering of search engines and other sources, this disrupts the academic integrity principle, destroying the fundamentals of truthfulness, attribution, and intellectual property.

Nonetheless, with regard to the high availability of this tool and similar ones of the nature of AI, academic misconduct problems have become more of a concern than less. The instructors have to cope with the uphill situation of identifying all AI-assisted plagiarism instances, as traditional plagiarism detection methods to work for AI-generated data may be ineffective (Cong-Lem et al., 2024). The fame of ChatGPT involved in educational misconduct will not only lead to a loss of confidence and prestige of the institutions but would also eradicate the true learning experience. When students' tasks are AI-generated to complete academic assignments, they forget to work on crucial cognitive functions such as thinking, analysis, research, and writing. This will result in a culture of academic dishonesty and a reduction of the value or purpose of academic pursuits (Cong-Lem et al., 2024).

AI-enabled educational technologies introduce ethical issues that teachers must address through proactive measures, such as promoting academic integrity. This entails making students understand the ethical questions surrounding AI writing and developing advanced plagiarism detection systems that integrate transparent structures characterized by honesty, appropriateness, and responsibility within academic establishments. Such ethics committees are an appropriate approach to protect the honor and productivity of English language teaching, and all students should strictly abide by the code of conduct.

3) Limitations in language proficiency assessment

The comparative analysis conducted by Nkhobo and Chaka (2023) of student self-written papers and the corresponding essays that ChatGPT generated clearly demonstrates that there are major problems in evaluating language proficiency when only AI-generated materials are relied on. The discussion laid bare the variability of linguistic diversity, syntactic complexity, and referential cohesion, which, in the end, affects the validity and reliability of the language proficiency tests. According to Nkhobo and Chaka (2023), the structure of the essays for the two types—student-written and Chat GPT generated—differs in linguistic diversity. While AI ChatGPT is capable of producing an essay, the level of the language vocabulary may look low in comparison with human language. Such essays reveal similar language patterns and limited vocabulary range. Thus, teachers and assessors could face a harder time rating students' lexicon proficiency levels.

Similarly, Nkhobo and Chaka (2023) argue that it is where the form of language opting the student-written and Chat GPT generated essays is clearly different. Although it is able to produce grammatically correct sentences, it suffers from syntactic structure, which is not as complex as what you can encounter in writing that is human-produced. This divergence in syntactic complexity, however, proves very tricky for the precise examination of students' syntactic and grammatical proficiency: more complex sentences might not be as accurate as short lower-level sentences, although made by people. Furthermore, you can point out that referential cohesion, one of the key features that makes discourse coherent, is another feature of language proficiency assessment. The structure of the essay's discourse could become disjointed and disconnected if it completely depends on pre-trained models because it will be impossible to identify any clear links between ideas and concepts.

The standardization, objectivity, and accuracy of language proficiency assessments are affected by these limitations in the language performance of ChatGPT-generated content, which requires serious questioning about the reliability and validity of assessing this content. The ChatGPT ability to provide useful writing help and to create a text order with astonishing fluency is not sufficient, and the impossibility of recreating human seniority and impulse makes the right assessment of proficiency problematic (Nkhobo & Chaka, 2023). Teachers should be careful while including AI-developed items in the assessment process, assuring that they really reflect the student's language abilities and do not favor certain students, leading to biased assessment.

4) Technological dependence

Liu and Ma (2023) point out a related problem of students suddenly becoming over-dependent on ChatGPT, which could eventually lose their learning independence. A discussion by Liu and Ma (2023) regarding the application of ChatGPT in unofficial digital learning environments of EFL students shows the necessity of a correct balance between technology absorption and traditional principles of language learning to ensure independent students and self-regulation. ChatGPT indeed provides students with sufficient assistance and instruction material. However, it is concerning if a language student's learning process relies on AI-driven tools. ChatGPT can function as a shortcut to create content and provide feedback and responses, thus commoditizing students' effectiveness and motivation to participate in the language learning process (Meyer et al., 2023; Liu & Ma, 2023).

Instructors must also start reaching out to all language students and contribute to creating a holistic approach to language learning, such as utilizing both digital and traditional methodologies for the educational process to reduce dependence on technology. Building vital independent language skills and techniques is based on the diversity of learning procedures. To enhance the achievement

of language proficiency, educators should employ group discussions, role playing and, communicative tasks and other activities as relevant.

5. Discussion

The systematic review of ChatGPT's use in education, particularly in ELT, reveals a strong alignment with Piaget's (1969) constructivist theory, which emphasizes cognitive development through active student engagement and knowledge construction through interaction with the environment. ChatGPT supports this by offering personalized, adaptive learning environments encouraging exploration, critical thinking, and problem-solving. By incorporating ChatGPT within a constructivist framework, teachers can create more dynamic, student-centered experiences that enhance higher-order cognitive skills such as analysis, synthesis, and evaluation. These skills are further developed through ChatGPT's ability to simulate real-world problems, allowing students to immerse themselves in complex, realistic scenarios that promote innovation and creativity.

In addition to enhancing cognitive skills, ChatGPT supports individualized learning by adapting to each student's needs, in line with constructivist principles that emphasize personalized learning experiences. Gamification, challenges, and adaptive tasks are included so that there is more of an engaging and responsive environment for a student to learn in, thus giving the student's engagement and progress a lasting presence. In addition, ChatGPT enables scaffolding of writing support that scaffolds in students' understanding with guided support tied specifically to where the student is in his or her understanding. This is very effective in the case of difficult independent work, in alignment with Vygotsky's Zone of Proximal Development. Furthermore, ChatGPT enhances instant feedback, and the students can learn from it and reflect on their learning to develop self-regulated learning.

For instance, the reliance on AI tools may inadvertently shift the focus from fostering intrinsic motivation and creativity to optimizing performance metrics. Additionally, the assumptions about universal access and acceptance of AI technologies must be critically reevaluated to address disparities in resources and cultural attitudes toward technology in education.

ChatGPT's possible impact in education and ELT is transformational; however, it is also divisive because the use of ChatGPT in ELT raises significant concerns. The use of ChatGPT and other AI technologies in educational settings raises complex ethical, legal, and practical issues that affect many different stakeholders. More critical issues include overdependence on ChatGPT, the authenticity of work produced, ethical aspects of academic cheating, and constraining language assessment accuracy. However, this review emphasizes the revolutionary potential of ChatGPT in ELT while raising some serious issues regarding the long-term consequences such as its impact on intrinsic motivation and creativity. In addition, it is necessary to reevaluate assumptions about universal access to and acceptance of AI in education in part, especially given resource disparities and different cultural attitudes toward technology.

Developing comprehensive strategies to address these issues is crucial, calling for careful pedagogical reflection and implementation, including equipping teachers with the necessary skills to utilize AI detection systems to ensure the originality and authenticity of written content in students' work. These systems must be able to identify whether students write their work by themselves or use ChatGPT or another tool to generate the text. As its original purpose of AI detection, it is useful for detecting potential plagiarism and maintaining academic integrity. However, such detection systems are not perfect and could mistakenly label human-written text as AI-generated or vice versa, based on the writing style or language use that was inputted into the AI system. In addition, AI tools develop rapidly with new innovations. It is, therefore, possible that new software could be developed to block or alter AI detection.

Therefore, it is essential to understand that plagiarism is a prohibited action and a violation of true academic values. It is also important to instill among students an appreciation of the value of copyright and the significance of honesty and integrity. Teachers should teach students to use ChatGPT as an aid, not a substitute for their work, and guide them to use it for tasks such as quick searches and research support rather than to complete assignments by using ChatGPT to write an entire essay or solve a math problem. Encouraging students to exercise discernment and critical thinking when using ChatGPT will further promote academic integrity and responsible use of the tool. More importantly, establishing their self-esteem, confidence, and intrinsic motivation by completing their work can eliminate the problem of dishonesty in the long term with major impacts on others by inspiring and influencing good ethical conduct with no cost. It is also important to note that teachers should be good role models leading ethical processes and should begin by upholding academic integrity, including avoiding plagiarism and contract cheating involving recruiting a third party to complete the academic work. Promoting a culture of effective ethical practice helps to ensure students' successful and suitable academic endeavors in the future.

6. Suggestion

Given the findings and insights obtained from this study, ChatGPT has significant potential to enhance learning, but there are concerns that need to be addressed and managed, particularly in ELT. To enhance the opportunities of using ChatGPT for better outcomes as well as to address the disclosed concerns, the following recommendations for further advancements are proposed as follows.

1) Exploring the integration of ChatGPT with gamification

Further research should examine the possibility of integrating ChatGPT with game elements of different types of educational institutions and grade levels in the ELT context. It has been found that gamification helps increase students' interest, motivation, knowledge, and skills through the use of elements such as a mission, point system, and levels. Adding ChatGPT to the environment could make the interaction more personalized. More research could be directed towards how such integration affects students' attendance, enrollment, and the efficiency of language learning.

2) Combining ChatGPT with Augmented Reality (AR) and Virtual Reality (VR)

Another area that has potential for development is the application of ChatGPT in combination with AR and VR technologies to improve engagement among learners. For instance, ChatGPT can act as an expert consultant when implemented in a simulated mode which can provide immediate feedback to students. Such integration of the technologies in teaching and learning specifically aids the language learning, understanding, and use of language as required in real life situations.

3) Assessing the impact of ChatGPT on collaborative learning activities

As future research based on Vygotsky's and Piaget's theories related to collaboration in learning continues, the efficiency of using ChatGPT as a tool for assignments or discussions in a cooperative learning environment, where the ChatGPT is simply a mediator, could be evaluated. Meanwhile, the improvement of group-based learning outcomes, group dynamics, equal contribution, and the acquisition of higher order thinking and interpersonal communication skills should be examined and investigated.

4) Evaluating the long-term effects of ChatGPT integration in ELT

Longitudinal studies should be employed to assess the long-term consequences of integrating ChatGPT into ELT in the areas of literacy skills (writing and reading), comprehension, students' academic performance, and attitude towards learning English. In addition, analyzing the changes in students' perceptions towards the use of ChatGPT as they continue to interact with it will also help

determine its effects on education, providing teachers with guidelines for their teaching methods to effectively integrate AI into their lessons while becoming aware of necessary precautions and the potential challenges that may arise.

Declarations

Author Contributions. S.A. was the only contributor in conducting the study, analyzing the data, and writing the manuscript. The author read and approved the final manuscript.

Conflicts of Interest. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Ethical Approval. As this is a systematic review of previously published literature, the study did not require ethical approval. However, the review adhered to ethical standards in the synthesis and reporting of research findings.

Data Availability Statement. The data underlying the findings presented in the manuscript are available for testing by reviewers in a way that preserves the reviewers' anonymity.

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About the Contributor(s)

Surattana Adipat, PhD, is an Associate Professor in the Department of Curriculum and Instruction, Faculty of Education, at Ramkhamhaeng University in Bangkok, Thailand. Her research interests include English Language Teaching, especially in the areas of curriculum and course development, teaching methodology, technology in ELT, and teacher education.

Email: ajsurattana@gmail.com

ORCID ID: <https://orcid.org/0000-0002-2433-1547>

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