

A Systematic Literature Review: Teachers' Perceptions on the usage of ChatGPT in English Language Teaching (ELT)

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Abstract

ChatGPT has emerged as a trend to support education in ELT. However, the review of ChatGPT in ELT is still scarce although it is essential to maintain educational standards. Thus, this systematic literature review identifies the potentials and challenges of integrating ChatGPT in ELT. Two databases were used, namely Web of Science (WoS) and Scopus, 17 articles were extracted of a total of 362 articles, ranging from 2023 to 2024, with exclusion and inclusion criteria taken into consideration. First, the findings indicated four main potentials including lesson planning, creation of teaching and learning materials, giving instant feedback and improvement of academic achievement. Second, the findings indicated five main challenges including less accuracy of information, over reliance on ChatGPT, inadequate alignment with cultural contexts, plagiarism and data privacy. These findings suggest there are still gaps in research on ChatGPT in ELT. Generally, this review gives stakeholders insights regarding the use of ChatGPT in ELT and helps researchers in identifying gaps to do research in the future for better education.

Keywords: ChatGPT, English language Teaching (ELT), Artificial Intelligence (AI), Perceptions, Technology

Introduction

Since ChatGPT was launched at the end of 2022, it has become a notable subject in educational field (Vargas-Murillo et al., 2023). Educators and students have been trying to use it for variety purposes. ChatGPT has the chatbot feature that demonstrates human-like conversations across various topics. With the emergence of ChatGPT, it continually broadens the scope of education, includes E-learning and online self-learning. It promotes learning opportunities for anyone, as acknowledged in the fourth goal of Sustainable Development Goals (SDG) which is quality education (Rosa, 2017). It focuses on the need of quality education to support industries in the future. Artificial Intelligence (AI) exhibits the capacity to revolutionize education to achieve quality, equality and inclusion by 2030 (Nahar, 2024). Besides, ChatGPT enables teachers to create innovative and interactive materials in teaching English to cater learner's style in the process of achieving the fourth goal of SDG (Chinonso et

al., 2023). It is also aligned with Shift 7 in Malaysia Blueprint 2013-2025. It emphasises on the maximise use of technologies to expand access to high quality teaching. However, it takes time to make changes to achieve the goal of SDG and Malaysia Blueprint 2013-2025.

ChatGPT had gradually substituted human in many tasks recently, teachers faced challenges in the digital age (ElSayary, 2024a). Some teachers were concerned that the integration of ChatGPT into educational settings might diminish their role and potentially threaten their job. This was evident by a study from Wang et al. (2023). Existing literature have begun to explore the benefits, potentials and problems, investigate students' and lecturers' perceptions on the adoption of ChatGPT in education. However, the studies about how well can English teachers integrate ChatGPT in English language teaching (ELT) remain limited. To address this gap, there is a need to explore English teachers' perceptions on the usage on ChatGPT further. This systematic literature review aimed to review the previous studies on teachers' perceptions regarding the adoption of ChatGPT in ELT from 2023 to 2024. This systematic literature review offers practical implications of incorporating ChatGPT for educators in ELT. It also contributes to a deeper understanding of how ChatGPT can be utilised effectively. Thus, previous studies from 2023 to 2024 were reviewed as they revealed the current trends of ChatGPT in ELT since ChatGPT was launched at the end of 2022. The following are the research questions for this study.

1. How do teachers perceive the potentials of integrating ChatGPT in English language Teaching (ELT)?
2. What are the common challenges do teachers face in incorporating ChatGPT into English language teaching (ELT)?

Literature Review

Trends of ChatGPT

ChatGPT gained popularity and interest among professionals from various industries since it was introduced starting 2022 (Alharbi, 2023; Haleem et al., 2022). ChatGPT had become a trend and it is one of the significant tools to meet the demands in the 21st century, especially the education sector.

ChatGPT offers great potentials for the users. It is good at tailoring individuals' needs and preferences. It can imitate various writing styles to suit individuals and preferences that can lead to customer service and education (Zhai, 2022). It is smart and able to answer complicated answers by understanding and analysing the prompts that will benefit more industries for sustainable development (Aljanabi, 2023).

Reviews on ChatGPT in ELT

Many studies regarding ELT and ChatGPT have been conducted. Previous studies highlighted that most teachers possessed positive attitudes towards ChatGPT (Kasneci et al., 2023; Rahimi et al., 2024). Selvanathan and Narayanan (2024) reported that using ChatGPT saved teachers' time in planning lessons, creating exercises and quizzes. Kasneci et al. (2023) stated ChatGPT had potentials to grade students' work. It was able to identify strength and weakness on students' work in seconds.

Most studies paid attention to students' perceptions on the use of ChatGPT. Students perceived that ChatGPT helped them to generate ideas in doing assignments and it provided

feedback on their writing style (Črček & Patekar, 2023; Escalante et al., 2023). Jowarder (2023) reported that students perceived ChatGPT was useful and easy to clarify difficult concepts. Ngo (2023) highlighted that Vietnamese university were positive in using ChatGPT for their learning but they were aware of the weakness of ChatGPT, especially the reliability of source.

Methods

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) framework, comprising four stages: identification, screening, eligibility, and inclusion, as illustrated in Figure 1. Researchers had utilized PRISMA because to its comprehensiveness and versatility compared to previous studies. As a result, the objectives of this study and each aspect of the systematic review process were outlined below.

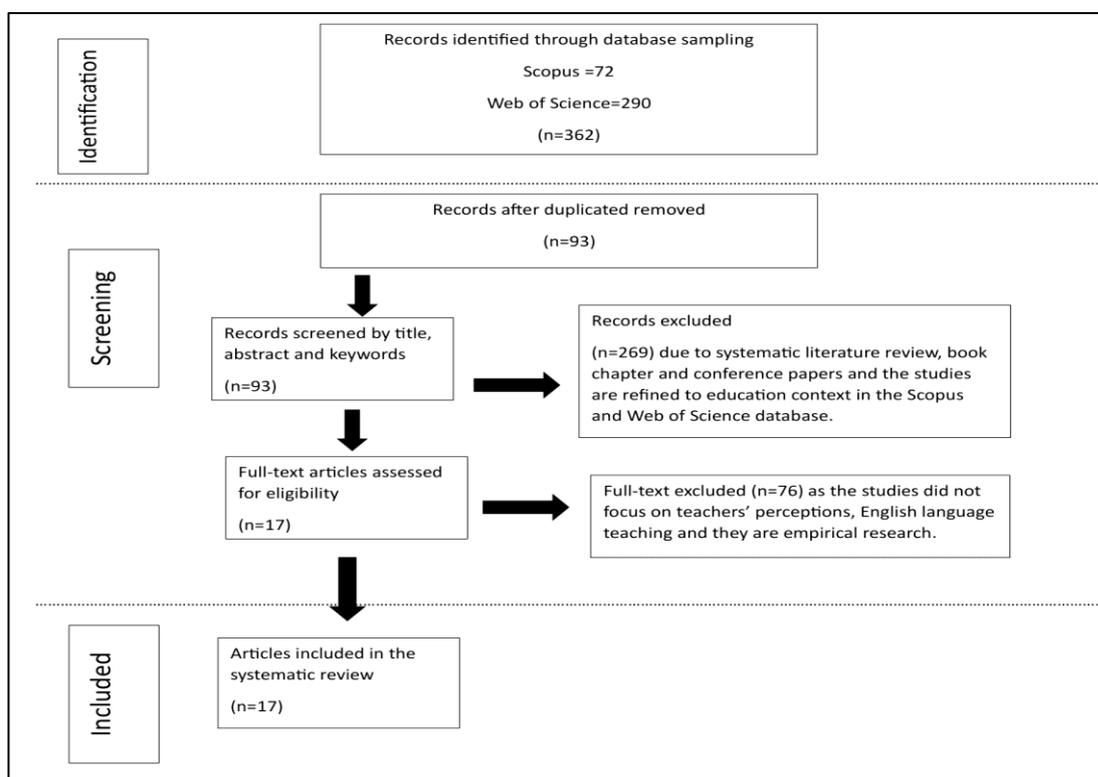


Figure 1: PRISMA systematic review revised from Page et al. (2021)

Identification

The initial phase in the systematic review involved identification process as outlined in the PRISMA guidelines. Two databases had been selected, namely Web Of Science (WoS) and Scopus. A lot of consideration had been made when the key words were included in the systematic review. Words related to ChatGPT and ELT were included. Table 1 displayed the search string used in this study for each database.

Table 1

Search string used in this study

Database	Search string
Scopus	TITLE-ABS-KEY ("CHATGPT*" OR "using ChatGPT in teaching English") AND ("Teachers' perceptions*" OR "Teachers' acceptance" OR "Teachers' beliefs" OR "Teachers' views" OR "teachers' thoughts" OR "teachers' viewpoints" OR "language teachers") AND ("English language Teaching*" OR "ELT" OR "English as a Second language" OR "ESL" OR "teaching English" OR "English teaching" OR "English language teaching practice" OR "teaching practice" OR "ESL")
Web of Science	ALL=("ChatGPT" AND "artificial intelligence" OR "AI"AND "English language teaching" OR "ELT" AND "English teaching practice" AND "teacher perspective" OR "teacher's views" OR "teachers' perception" AND "language teacher" OR "English teachers" NOT "students" NOT "Systematic Literature Review")

Screening

After identifying articles from the database, duplicate articles were removed from the databases. According to the initial screening phase, 72 articles were identified in Scopus database and 290 articles were found in Web of Science database. 269 articles were removed because some studies were systematic literature review, book chapter, conference paper and the database were narrowed to focus on education using the filter option, resulting 93 articles were screened further using Microsoft Excel.

Table 2

Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • Studies from 2023-2024 • Articles from journals • Related to teachers' perceptions regarding the usage of ChatGPT in ELT 	<ul style="list-style-type: none"> • Book chapters • Not related to teachers' perceptions regarding the usage of ChatGPT in ELT

After selecting articles based on the inclusion and exclusion criteria in Table 2, 17 articles were included in this systematic literature review. Book chapters were excluded because they were lack of comprehensiveness (González-Albo & Bordons, 2011).

Included

Table 3 showed that there were 17 articles for the systematic review focused on the adoption of ChatGPT in ELT. 12 articles were extracted from Scopus database, 5 articles were extracted from Web of Science database. The search for relevant literature review was limited to publications from 2023 to 2024. The previous studies before 2022 were not included in this systematic literature review as it might not accurately present the latest trends of ChatGPT in ELT since ChatGPT was launched at the end of 2022. Thus, the publications from 2023 to 2024 were included in this systematic literature review as they reflected current trends of ChatGPT in ELT.

Table 3

Summary of Selected Studies

Study	Database	Aim	Sample	Findings
Mabuan (2024)	WoS	To explore educators' perceptions regarding the incorporation of ChatGPT as a pedagogical tool	115 English language teachers	ChatGPT supported ELT by improving vocabulary expansion, writing practice, language fluency, and communication skills.
Adeyele, and Ramnarain (2024).	WoS	To explore teachers' knowledge of ChatGPT and the inquiry-based learning (IBL) 5E model.	two distinct focus groups of Science teachers	It revealed that integrating ChatGPT into the Inquiry-Based Learning (IBL) 5E model enhances lesson planning, personalized instruction, and student engagement.
Alenezi et al. (2023)	WoS	To obtain insights into teachers' perceptions on the incorporation of ChatGPT into language learning for special education.	199 teachers	Teachers showed positive attitudes toward ChatGPT's role in facilitating communication and language learning. Teachers expressed that ChatGPT could potentially replace traditional teaching methods.
Wang et al. (2024)	WoS	To investigate the impact on learning motivation and cognitive load and its effectiveness in instructing English reading comprehension.	42 undergraduate students	ChatGPT provided high quality reading comprehension questions aligned with expert-crafted questions and undergraduate students showed improvement in students' reading comprehension abilities.
Marzuki et al. (2023)	WoS	to evaluate Artificial Intelligence (AI) tool for writing and analyse their impact on student writing	4 EFL teachers from three distinct universities	It found that AI technologies like ChatGPT can help students overcome creative barriers and generate ideas, but teachers advised against overusing them.
Gustilo et al. (2024)	Scopus	To investigate advantages and hindrances of ADWTs (Algorithmically-Driven Writing Tools) in education	100 educators from universities	It revealed that teachers highly value AI-driven tools for supporting educational goals but face barriers such as limited access, lack of knowledge, and concerns over academic integrity and creativity.
Galindo-Domínguez et al. (2024)	Scopus	To find out how the teachers AI tools in the classroom	445 teachers	The findings indicated that ChatGPT, along with other AI tools, is used mostly for

				content creation. Higher education teachers applied AI for academic tasks like text translation and data analysis.
Pang et al. (2024)	Scopus	To investigate educators' attitude of using ChatGPT to give feedback	19 educators	It revealed that AI technologies help improve feedback quality for non-English-speaking instructors.
ElSayary (2024)	Scopus	To examine teachers' views on ChatGPT as a digital teaching and learning tool	40 teachers	It revealed that teachers were benefited from using ChatGPT for lesson planning and teaching. However, challenges of using ChatGPT include information accuracy, bias and lack of human interaction.
Hieu and Thao (2024)	Scopus	To examine teachers' views on ChatGPT in fairy tale retelling writing	9 EFL teachers	Teachers highlighted challenges related to AI's over-reliance, cultural context alignment, and quality of AI-generated language
Al-khresheh (2024)	Scopus	To explore how English language teachers view ChatGPT's pedagogical benefits and obstacles and pave the way for digital innovations	46 English language teachers	English teachers emphasized ChatGPT's ability to provide instant feedback and customize learning pathways. However, challenges such as over reliance, cultural awareness, and diminished creativity were revealed.
Bao and Li (2023)	Scopus	To gain insights into how GSIs explore and perceive ChatGPT and the methods of utilizing ChatGPT in language teaching	5 graduate students	It highlighted that ChatGPT was mainly used as an advanced search engine, with teachers emphasizing the importance of writing effective prompts for better outcomes. Limitations in language level adjustment were highlighted.
Yeh (2024)	Scopus	To provide insights into the ways in which AI can improve language instruction by personalizing content and fostering the development of communicative skills	13 in-service teachers	Teachers revealed that AI can improve language instruction by enabling them to develop interactive and adaptive learning materials that enhance students' listening and speaking competencies.

Evmenova et al. (2024)	Scopus	To investigate the teachers who deal with multilingual students, both those with and without disabilities, regarding the ChatGPT applications in language learning.	137 teachers	Teachers reported that multilingual students found concerns about ChatGPT's impact on creativity, critical thinking, and academic integrity, though teachers saw potentials for supporting Universal Design for Learning (UDL) principles.
Alammari (2024)	Scopus	To find out how artificial intelligence in education was implemented in the Saudi education system	125 educators	It revealed a dual perspective on AI integration, recognizing its potential for personalized learning but also raising concerns about plagiarism.
Su and Yang (2023)	Scopus	To investigate the potential, advantages, and obstacles of ChatGPT in the field of education	10 preschool teachers	Although ChatGPT has the potential to enhance lesson planning, it is necessary to address challenges such as hardware issues, a shortage of resources, and accuracy concerns.
Synekop et al. (2024)	Scopus	To examine and compare the attitudes and perceptions of students and instructors regarding the use of ChatGPT in ESP education.	22 teachers and 60 students	It revealed differences in perceptions of academic integrity from teachers and undergraduate students. Teachers emphasized the need for restrictions on AI use in assignments.

Data Analysis Procedure

All articles were exported to a reference management program, Mendeley. A thematic analysis was used to determine the major themes addressing the research questions:

1. How do teachers perceive the potentials of integrating ChatGPT in English language Teaching ELT?
2. What are the challenges do teachers face in incorporating ChatGPT into English language teaching (ELT)?

Results

The articles were analysed and categorised into theme to answer the research questions. The potentials and challenges of ChatGPT in ELT were tabulated and reported in this section.

Research Question 1: How do teachers perceive the potentials of integrating ChatGPT in English language Teaching (ELT)?

Table 4

Potentials of Integrating ChatGPT in ELT

Potentials	Studies
Lesson planning	Su and Yang (2023), Adeyele and Ramnarain (2024)
Creating teaching and learning materials	Bao and Li (2023), Yeh (2024), Al-khresheh (2024), Galindo-Domínguez et al. (2024), Wang et al. (2024)
Give feedback	Al-khresheh (2024), Bao and Li (2023), Pang et al. (2024)
Enhance academic performance	Alammari (2024), Hieu and Thao (2024), Synekop et al. (2024), Mabuan (2024)

Table 4 showed the potentials of integrating ChatGPT in ELT. These potentials of integrating ChatGPT were sorted from 17 studies. This systematic literature review identified four main potentials of ChatGPT usage in ELT as these four main potentials were highlighted in recent studies. Two studies from Adeyele and Ramnarain (2024) and Su and Yang (2023) reported that using ChatGPT helped teachers to plan lessons.

Besides, five studies highlighted that ChatGPT helped English teachers to create teaching and learning materials. Bao and Li (2023) revealed that it was easy to prompt ChatGPT to make teaching and learning materials. (Yeh, 2024) reported that ChatGPT could assist teachers to create diverse textual materials including thematic karaoke materials. (Al-khresheh, 2024) revealed that teachers found ChatGPT was accessible for them to make differentiation tasks for students. Galindo-Domínguez et al. (2024) stated primary and secondary school teachers showed positive attitude of using AI to create teaching content. Wang et al. (2024) revealed ChatGPT had the ability to create high quality reading comprehension questions.

Other than that, three studies reported that ChatGPT could help the teachers give the students immediate feedback. Al-khresheh (2024), Pang et al. (2024) and Bao and Li (2023) highlighted that ChatGPT helped teachers to notice errors in grammar and writing styles effectively.

Four studies revealed ChatGPT could enhance academic performance. In the study from Mabuan (2024), several teachers reported that ChatGPT provided learners opportunities to practice language skills beyond the classroom that could arouse learners' interest to learn language skills. Synekop et al. (2024) revealed that ChatGPT could be used in teaching English to help the students to enhance their general knowledge and language skills. In Hieu and Thao (2024)'s study, ChatGPT could enhance creative writing and storytelling. In Alammari (2024)'s study, teachers expressed they saw an improvement in students' academic when ChatGPT was adopted in lessons.

Research Question 2: What are the common challenges do teachers face in incorporating ChatGPT into English language teaching (ELT)?

Table 5

The Challenges of Integrating ChatGPT in ELT

Challenges	Studies
Less accuracy of information	EISavary (2024b), Hieu and Thao (2024), Evmenova et al. (2024), Gustilo et al. (2024), Su and Yang (2023)
Over reliance on ChatGPT	Hieu and Thao (2024), Al-khresheh (2024), Marzuki et al. (2023), Evmenova et al. (2024), Alammari (2024), Mabuan (2024)
Less aligned with cultural contexts	Hieu and Thao (2024), Al-khresheh (2024), Bao and Li (2023)
Plagiarism	Alammari (2024), Synekop et al. (2024), Mabuan (2024)
Data privacy	Hieu and Thao (2024), Alenezi et al. (2023), Mabuan (2024)

Table 5 showed that the challenges of incorporating ChatGPT in ELT. These challenges were sorted from 17 studies. This systematic literature review had identified challenges that educators faced in integrating ChatGPT in ELT as these five main challenges were in highlighted in recent studies. Five common challenges had emerged which were less accuracy of information, over reliance on ChatGPT, less alignment with cultural contexts, plagiarism and data privacy.

Five studies reported that educators were concerned about accuracy of information provided by ChatGPT. Hieu (2024), Su and Yang (2023) and EISavary (2024) reported that less of accuracy of information would cause students struggle in their learning. Finding from Gustilo et al. (2024) mentioned that inaccurate responses may lead to ineffective learning outcomes. Evmenova et al. (2024) stated that teachers who used ChatGPT previously found the information was inaccurate.

Six studies reported that the users would be too dependent on the ChatGPT. Based on the studies from Alammari (2024) and Hieu and Thao (2024), they concerned that the educators were relied on ChatGPT on daily work.

In Hieu and Thao (2024)'s study, the teachers had the difficulty in aligning with the cultural contexts in lesson planning when they used ChatGPT. The finding from Al-khresheh (2024) showed that ChatGPT lacked of cultural sensitivity in planning lessons. Bao and Li (2023) revealed that ChatGPT had the limitation to adjust the language difficulty level.

Three studies from Alammari (2024), Mabuan (2024) and Synekop et al. (2024) stated the use of ChatGPT encouraged the learners to cheat. (Mabuan, 2024)revealed that teachers were concerned that students would cheat or plagiarise as responses can be generated in seconds. Synekop et al. (2024) highlighted doing assignment using ChatGPT violated academic integrity rules. Alammari (2024) revealed university students utilised AI tools in doing assignment that would lead to plagiarism.

One of ethical concerns of using ChatGPT is data privacy. Three studies from Alenezi et al. (2023), Hieu and Thao (2024) and Mabuan (2024) highlighted that the teachers expressed security concerns when using ChatGPT. Mabuan (2024) emphasised that teachers

played a crucial role to inform learners that entering personal information might lead to the risks of revealing personal information. Hieu and Thao (2024) highlighted that there was a high tendency of generating inappropriate content if the users shared personal data in ChatGPT. Alenezi et al., (2023) revealed that ChatGPT was not safe and it might lead to exposure of sensitive information. Even though ChatGPT brought users convenience, these findings helped the researchers to understand the challenges of integrating ChatGPT in ELT. Hence, these findings proved that the researchers intended to help the participants and the researchers to be aware of the consequences of utilizing ChatGPT.

Discussion

The findings highlighted the potentials and challenges regarding use of ChatGPT in ELT. Firstly, the findings highlighted that ChatGPT assisted the teachers to create teaching and learning materials. These findings showed that the transition from traditional methods to the current trend which was employing AI in education. The teachers found ChatGPT saved their time to plan lessons because they found it was easy to use and they were positive to use technology. It was consistent from the studies from Ashfaque et al. (2020) and Rajendran and Yunus (2021) . It showed that teachers applied pedagogical skills using ChatGPT in ELT to motivate the learners and eventually showed improvement in academic. These were consistent with the studies from Yunus and Abdullah (2011) and Nordin et al. (2010).

Secondly, the findings reported that ChatGPT could give teachers instant feedback, especially in grading written work. There were several studies revealed giving students feedback in writing was essential so the students could review and notice mistakes. It was beneficial for the students who struggled in writing. It also provided a safe environment to practice oral language. These findings were consistent with a study from Meo et al. (2024) and Shi (2024).

Thirdly, the teachers perceived that integrating ChatGPT could enhance students' academic performance based on the findings. These findings showed that the adoption of technology could arouse learners' interest to learn language. These findings were consistent from a study from Wil et al. (2019) . Wil et al, (2019) highlighted that social media was a platform where the students could create the content to express themselves as not everyone enjoyed learning language through tuition classes and books.

Despite ChatGPT offered several benefits in ELT in this review, this review also identified challenges of incorporating ChatGPT in ELT. The findings from the studies revealed that ChatGPT provided less accuracy of information. It meant that if the users did not provide a clear and concise prompt, the users might not get information they needed. The information that ChatGPT provided maybe less accurate as it did not provide the information from reliable sources. This finding was consistent with a study from Islam and Islam (2024). Hence, it is necessary to check the reliability and validity of the information.

Besides, the findings reported that the teachers were concerned that over-reliance on ChatGPT. Dependence on ChatGPT could encourage cheating and dishonesty. This is because instant feedback provided by ChatGPT could hinder students from developing critical thinking skills (Ridzuan et al., 2024). As ChatGPT provided less accurate information so the lesson plans that suggested by ChatGPT might not suitable and relatable to the learners' cultural context.

This was consistent with a study from Japoshvili-Ghvinashvili and Suleman (2023). Teachers should identify learners' learning strategies to cater individual differences (Bayuong et al., 2019). Teachers should have a real interpersonal communication with the students to understand them better.

Lastly, the findings showed that the teachers expressed concern about data privacy when they used ChatGPT. The introduction of ChatGPT and other AI tools brought up a number of problems that required further investigation (Baskara, 2023). Training and guidelines should be provided for the teachers to overcome ethical issues (Jerry & Yunus, 2021). Teachers should be equipped with ICT skills for future of education (Lubis et al., 2011). Thus, it is essential to provide training and guidelines so the teachers were confident in using ChatGPT in ELT.

Conclusion

In conclusion, this systematic literature review identified four common potentials of integrating ChatGPT in ELT including save in planning lessons, creating teaching and learning materials, giving instant feedback and enhancing academic performance, whereas this systematic literature review identified five common challenges of incorporating ChatGPT in ELT including less accuracy of information, over reliance on the use of ChatGPT, less alignment with cultural contexts, plagiarism and data privacy. Thus, the gap has been filled. One of the limitations of this review is there are studies focus on different countries and different educational levels including kindergarten, primary, secondary and higher education. It can be challenging to generalise the findings in ELT settings. However, this limitation opens up a new opportunity for future research. Future research can address how ChatGPT can be integrated in teaching different language skills. This systematic review addresses significantly to the knowledge gap which is essential for achieving fourth goal Sustainable Development (SDG) goal and Shift 7 in Malaysia Blueprint 2013-2025.

References

- Adeyele, V. O., & Ramnarain, U. (2024). Exploring the Integration of ChatGPT in Inquiry-based Learning: Teacher Perspectives. *International Journal of Technology in Education*, 7(2), 200–217. <https://doi.org/10.46328/ijte.638>
- Alammari, A. (2024). Evaluating generative AI integration in Saudi Arabian education: a mixed-methods study. *PeerJ Computer Science*, 10. <https://doi.org/10.7717/peerj-cs.1879>
- Alenezi, M. A. K., Mohamed, A. M., & Shaaban, T. S. (2023). Revolutionizing EFL special education: how ChatGPT is transforming the way teachers approach language learning. *Innoeduca. International Journal of Technology and Educational Innovation*, 9(2), 5–23. <https://doi.org/10.24310/innoeduca.2023.v9i2.16774>
- Alharbi, W. (2023). AI in the Foreign Language Classroom: A Pedagogical Overview of Automated Writing Assistance Tools. *Education Research International*, 2023(1). <https://doi.org/10.1155/2023/4253331>
- Aljanabi, M. (2023). ChatGPT: Future Directions and Open possibilities. In *Mesopotamian Journal of CyberSecurity* (Vol. 2023, pp. 16–17). Mesopotamian Academic Press. <https://doi.org/10.58496/MJCS/2023/003>
- Al-khresheh, M. H. (2024). Bridging technology and pedagogy from a global lens: Teachers' perspectives on integrating ChatGPT in English language teaching. *Computers and Education: Artificial Intelligence*, 6. <https://doi.org/10.1016/j.caeai.2024.100218>

- Ashfaque, M. W., Iqbal, S., Tharewal, S., & Kayte, C. N. (2020). A Review on Techniques, Characteristics and approaches of an intelligent tutoring Chatbot system. *International Conference on Smart Innovations in Design, Environment, Management, Planning and Computing (ICSIDEMPC)*, 258–262. <https://ieeexplore.ieee.org/abstract/document/9299583/>
- Bao, Y., & Li, B. (2023). A Preliminary Study on Graduate Student Instructors' Exploration, Perception, and Use of ChatGPT. *International Journal of Computer-Assisted Language Learning and Teaching*, 13(1). <https://doi.org/10.4018/IJCALLT.332873>
- Baskara, F. R. (2023). AI-Driven Dynamics: ChatGPT Transforming ELT Teacher-Student Interactions. *Lensa: Kajian Kebahasaan, Kesusastraan, Dan Budaya*, 13(2), 261–275. <https://doi.org/10.26714/lensa.13.2.2023.261-275>
- Bayuong, P. D., Hashim, H., & Yunus, M. Md. (2019). Identifying Language Learning Strategies Used by ESL Learners in A Rural Primary School. *International Journal of Academic Research in Progressive Education and Development*, 8(3), 151–165. <https://doi.org/10.6007/ijarped/v8-i3/6311>
- Chinonso, O. E., Mfon-Ette Theresa, A., & Aduke, T. C. (2023). ChatGPT for Teaching, Learning and Research: Prospects and Challenges. *Glob Acad J Humanit Soc Sci*, 5. <https://doi.org/10.36348/gajhss.2023.v05i02.001>
- Črček, N., & Patekar, J. (2023). Writing with AI: University Students' Use of ChatGPT. *Journal of Language and Education*, 9(4), 128–138. <https://doi.org/10.17323/jle.2023.17379>
- ElSayary, A. (2024a). An investigation of teachers' perceptions of using ChatGPT as a supporting tool for teaching and learning in the digital era. *Journal of Computer Assisted Learning*, 40(3), 931–945. <https://doi.org/10.1111/JCAL.12926>
- ElSayary, A. (2024b). An investigation of teachers' perceptions of using ChatGPT as a supporting tool for teaching and learning in the digital era. *Journal of Computer Assisted Learning*, 40(3), 931–945. <https://doi.org/10.1111/JCAL.12926>
- Escalante, J., Pack, A., & Barrett, A. (2023). AI-generated feedback on writing: insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00425-2>
- Evmenova, A. S., Borup, J., & Shin, J. K. (2024). Harnessing the Power of Generative AI to Support ALL Learners. *TechTrends*, 68(4), 820–831. <https://doi.org/10.1007/s11528-024-00966-x>
- Galindo-Domínguez, H., Delgado, N., Losada, D., & Etxabe, J. M. (2024). An analysis of the use of artificial intelligence in education in Spain: The in-service teacher's perspective. *Journal of Digital Learning in Teacher Education*, 40(1), 41–56. <https://doi.org/10.1080/21532974.2023.2284726>
- González-Albo, B., & Bordons, M. (2011). Articles vs. proceedings papers: Do they differ in research relevance and impact? A case study in the Library and Information Science field. *Journal of Informetrics*, 5(3), 369–381. <https://doi.org/10.1016/J.JOI.2011.01.011>
- Gustilo, L., Ong, E., & Lapinid, M. R. (2024). Algorithmically-driven writing and academic integrity: exploring educators' practices, perceptions, and policies in AI era. *International Journal for Educational Integrity*, 20(1). <https://doi.org/10.1007/s40979-024-00153-8>
- Haleem, A., Javaid, M., & Singh, R. P. (2022). An era of ChatGPT as a significant futuristic support tool: A study on features, abilities, and challenges. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 2(4). <https://doi.org/10.1016/j.tbench.2023.100089>

- Hieu, H. H., & Thao, L. T. (2024). Exploring the Impact of AI in Language Education: Vietnamese EFL Teachers' Views on Using ChatGPT for Fairy Tale Retelling Tasks. *International Journal of Learning, Teaching and Educational Research*, 23(3), 486–503. <https://doi.org/10.26803/ijlter.23.3.24>
- Islam, I., & Islam, M. N. (2024). Exploring The Opportunities And Challenges of ChatGPT in Academia. *Discover Education*, 3(1), 3. <https://doi.org/10.1007/s44217-024-00114-w>
- Japoshvili-Ghvinashvili, M., & Suleman, N. (2023). Assisting ELT Teachers: Designing Activities for the Use of ChatGPT in Teaching and Learning. *Pakistan Journal of Multidisciplinary Innovation (PJMI)*, 2(1), 24–35. <https://journals.airsd.org/index.php/pjmi>
- Jerry, M., & Yunus, M. M. (2021). Blended learning in rural primary ESL classroom: Do or don't. *International Journal of Learning, Teaching and Educational Research*, 20(2), 152–173. <https://doi.org/10.26803/ijlter.20.2.9>
- Jowarder, M. I. (2023). The Influence of ChatGPT on Social Science Students: Insights Drawn from Undergraduate Students in the United States. *Indonesian Journal of Innovation and Applied Sciences (IJIAS)*, 3(2), 194–200. <https://doi.org/10.47540/ijias.v3i2.878>
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/J.LINDIF.2023.102274>
- Lubis, M. A., Abdullah Awang Lampoh, M. M. Y., Shahar, S. N., Ishak, N. M., & Muhamad, T. A. (2011). The Use of ICT in Teaching Islamic Subjects in Brunei Darussalam. *International Journal of Education and Information Technologies*, 1(5), 79–86.
- Mabuan, R. A. (2024). ChatGPT and ELT: Exploring Teachers' Voices. *International Journal of Technology in Education*, 7(1), 128–153. <https://doi.org/10.46328/ijte.523>
- Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2236469>
- Meo, M. J., Alqahtani, N., Albedah, F., & Banu, S. (2024). Empowering Saudi EFL Learners Using ChatGPT: An Analysis of Challenges and Educational Opportunities. *Forum for Linguistic Studies*, 6(6), 516–527. <https://doi.org/10.30564/fls.v6i6.7426>
- Nahar, S. (2024). Modeling the effects of artificial intelligence (AI)-based innovation on sustainable development goals (SDGs): Applying a system dynamics perspective in a cross-country setting. *Technological Forecasting and Social Change*, 201. <https://doi.org/10.1016/j.techfore.2023.123203>
- Ngo, T. T. A. (2023). The Perception by University Students of the Use of ChatGPT in Education. *International Journal of Emerging Technologies in Learning*, 18(17), 4–19. <https://doi.org/10.3991/ijet.v18i17.39019>
- Nordin, N. M., Hamzah, M. I., Yunus, M. M., & Embi, M. A. (2010). The mobile learning environment for the in-service school administrators. *Procedia - Social and Behavioral Sciences*, 7, 671–679. <https://doi.org/10.1016/j.sbspro.2010.10.091>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. . <https://doi.org/10.1136/bmj.n71>

- Pang, T. Y., Kootsookos, A., & Cheng, C.-T. (2024). Artificial Intelligence Use in Feedback: A Qualitative Analysis. In *Journal of University Teaching and Learning Practice* (Issue 6).
- Rahimi, A., Artificial, A. S.-P.-C. and E., & 2024, undefined. (2024). The role of ChatGPT readiness in shaping language teachers' language teaching innovation and meeting accountability: A bisymmetric approach. *Computers and Education: Artificial Intelligence*,. <https://www.sciencedirect.com/science/article/pii/S2666920X24000614>
- Rajendran, T., & Md Yunus, M. (2021). A Systematic Literature Review on the use of Mobile-assisted Language Learning (MALL) for Enhancing Speaking Skills among ESL and EFL Learners. *International Journal of Academic Research in Progressive Education and Development*, 10(1), 586–609. <https://doi.org/10.6007/ijarped/v10-i1/8939>
- Ridzuan, A. R., Jamri, M. H., Zain, Z. M., Khairuddin, K., Afzaliza, N., Ibrahim, N., Shazana, N., Rani, A., Nur, S., & Hadi, I. A. (2024). The Usage Of ChatGPT As An Alternative Way Of Learning. *Journal of Media and Society*, 7(2), 2682–9193. <https://ir.uitm.edu.my/id/eprint/97619/1/97619.pdf>
- Rosa, W. (2017). Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. *A New Era in Global Health: Nursing and the United Nations 2030 Agenda for Sustainable Development*, 283. https://books.google.com/books?hl=en&lr=lang_en&id=o1ICDgAAQBAJ&oi=fnd&pg=PA283&dq=Rosa,+W.+Goal+4:+Ensure+inclusive+and+equitable+quality+education+and+promote+lifelong+learning+opportunities+for+all.&ots=fFYWY3XOgk&sig=HbF9_GeCcuK1p-qq0j866tjG4Bs
- Selvanathan, B., & Narayanan, S. (2024). Chatgpt in Higher Education Malaysia: An Opportunity or Threat to The Education System? *International Journal of Academic Research in Progressive Education and Development*, 13(3). <https://doi.org/10.6007/ijarped/v13-i3/21455>
- Shi, X. (2024). Advantages, Challenges and Prospects of ChatGPT in Oral English Teaching. *Transactions on Social Science, Education and Humanities Research*, 4, 99–109.
- Su, J., & Yang, W. (2023). Powerful or mediocre? Kindergarten teachers' perspectives on using ChatGPT in early childhood education. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2023.2266490>
- Synekop, O., Lytovchenko, I., Lavrysh, Y., & Lukianenko, V. (2024). Use of Chat GPT in English for Engineering Classes: Are Students' and Teachers' Views on Its Opportunities and Challenges Similar? *International Journal of Interactive Mobile Technologies*, 18(3), 129–146. <https://doi.org/10.3991/ijim.v18i03.45025>
- Vargas-Murillo, A. R., de la Asuncion Pari-Bedoya, I. N. M., & de Jesús Guevara-Soto, F. (2023). Challenges and Opportunities of AI-Assisted Learning: A Systematic Literature Review on the Impact of ChatGPT Usage in Higher Education. *International Journal of Learning, Teaching and Educational Research*, 22(7), 122–135. <https://doi.org/10.26803/ijlter.22.7.7>
- Wang, X., Li, L., Tan, S. C., Yang, L., & Lei, J. (2023). Preparing for AI-enhanced education: Conceptualizing and empirically examining teachers' AI readiness. *Computers in Human Behavior*, 146, 107798. <https://doi.org/10.1016/J.CHB.2023.107798>
- Wang, X., Zhong, Y., Huang, C., & Huang, X. (2024). ChatPRCS: A Personalized Support System for English Reading Comprehension Based on ChatGPT. *IEEE Transactions on Learning Technologies*, 17, 1762–1776. <https://doi.org/10.1109/TLT.2024.3405747>
- Wil, C. S. C., Yunus, M. Md., & Suliman, A. (2019). The Use of Social Media to Assist Writing Skills among Secondary Pupils. *International Journal of Academic Research in*

Progressive Education and Development, 8(3). <https://doi.org/10.6007/ijarped/v8-i3/6388>

Yeh, H. C. (2024). The synergy of generative AI and inquiry-based learning: transforming the landscape of English teaching and learning. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2024.2335491>

Yunus, M. M., & Abdullah, N. R. K. R. B. (2011). Motivation and attitudes for learning English among year six students in primary rural school. *Procedia - Social and Behavioral Sciences*, 15, 2631–2636. <https://doi.org/10.1016/j.sbspro.2011.04.160>

Zhai, X. (2022). *ChatGPT User Experience: Implications for Education*. <https://www.researchgate.net/publication/366463233>