Artificial Intelligence in English Language Learning: A Systematic Review of AI Tools, Applications, and Pedagogical Outcomes

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Received: 15-05-*2025*
Accepted: 22-05-*2025*
Published: 01-06-*2025*

ABSTRACT.

The objective of this systematic review is to analyze the contributions of artificial intelligence (AI) to the domain of English Language Teaching (ELT), to survey the state of the art in the available AI instruments and applications as well as the accompanying instructional results. Under the influence of the unceasing march of technology, AI offers novelty that improves the classical methods of teaching. The review follows systematic literature review principles, often referring to the PRISMA model, to ensure transparency and rigor when analyzing and synthesizing relevant literature indexed in reputable databases. The findings demonstrate that highly sophisticated artificial intelligence, including chatbots like ChatGPT

and tailored educational activities, such as those in the educational platform Duolingo, is becoming increasingly important in the field of educational language technology (ELT). The sophisticated AI tools enhance learners' involvement and provide effective customized learning (at the right level and pace), coupled with instantaneous and unbiased feedback, which is critical for learners to develop proficiency in the productive language skills (writing and speaking). Nevertheless, the analysis quietly points to several long-standing issues, including high costs, lack of accessibility, overreliance, critical thinking suppression, and the ethical questions of data privacy, and the opacity and bias of algorithms. Most importantly, the analysis calls attention to the lack of preparation of teachers, frequently attributed to the paucity of opportunities to develop professionally in the AI-augmented pedagogical design. The review suggests a model that ensures equitable AI-augmented learning is targeted to a highly qualified teacher, emphasizing ethical practice, teacher training, and a greater reliance on pedagogical frameworks that promote blended learning.

Keywords: AI-augmented, language techno, pedagogical, lack of accessibility.

الملخص

تهدف هذه المراجعة المنهجية إلى تحليل مساهمات الذكاء الاصطناعي في مجال تدريس اللغة الإنجليزية، واستعراض أحدث ما توصلت إليه أدوات وتطبيقات الذكاء الاصطناعي المتاحة، بالإضافة إلى نتائج التدريس المصاحبة. وفي ظل التقدم التكنولوجي المتواصل، يُقدم الذكاء الاصطناعي ابتكارًا يُحسّن أساليب التدريس التقليدية. تتبع المراجعة مبادئ مراجعة الأدبيات المنهجية، وغالبًا ما تستعين بنموذج

PRISMA، لضمان الشفافية والدقة عند تحليل وتجميع الأدبيات ذات الصلة المفهرسة في قواعد بيانات موثوقة. تُظهر النتائج أن الذكاء الاصطناعي المتطور للغاية، بما في ذلك برامج الدردشة الآلية مثل ChatGPT والأنشطة التعليمية المصممة خصيصًا، مثل تلك الموجودة في منصة Duolingo التعليمية، يكتسب أهمية متزايدة في مجال تكنولوجيا اللغة التعليمية (ELT). تُعزز أدوات الذكاء الاصطناعي المتطورة مشاركة المتعلمين وتوفر تعلمًا فعالًا مُخصصًا (بالمستوى والوتيرة المناسبين)، إلى جانب تغذية راجعة فورية وغير متحيزة، وهو أمر بالغ الأهمية للمتعلمين لتطوير كفاءتهم في مهارات اللغة الإنتاجية (الكتابة والتحدث). ومع ذلك، يُشير التحليل بهدوء إلى العديد من القضايا طويلة الأمد، بما في ذلك ارتفاع التكاليف، ونقص إمكانية الوصول، والاعتماد المفرط، وقمع التفكير النقدي، والمسائل الأخلاقية المتعلقة بخصوصية البيانات، وغموض الخوارزميات وتحيزها. والأهم من ذلك، يُلفت التحليل الانتباه إلى نقص إعداد المعلمين، والذي يُعزى غالبًا إلى ندرة فرص التطوير المهني في التصميم التربوي المُعزز بالذكاء الاصطناعي. يقترح الاستعراض نموذجًا يضمن استهداف التعلم المُعزز بالذكاء الاصطناعي العادل للمعلمين المؤهلين تأهيلاً عالياً، مع التركيز على الممارسة الأخلاقية، وتدريب المعلمين، والاعتماد بشكل أكبر على الأطر التربوية التي تُعزز التعلم المُدمج.

الكلمات المفتاحية: مُعزز بالذكاء الاصطناعي، تقنية اللغة، تربوي، نقص إمكانية الوصول.

Introduction

The initial stages of the twenty- first century have been the most technologically advanced in the history of humankind. Everything in life, most especially education, has been transformed. English continues as the global lingua franca and is of utmost importance in communication, trade, and the acquisition of knowledge. This makes the demand for English Language Teaching (ELT) critical. The ELT had to move from the traditional language teaching approach which utilized a 'one size fits all' methodology in which the needs of participants in a class, in relation to proficiency levels, rates of language acquisition and the language resources available to the learners in the class, were ignored. This tends to result in

the learners stagnating at a language level which they are unable to transcend. Providing no individualized feedback serves as a barrier to the learners achieving proficiency.

The (AI) Artificial Intelligence of machines is defined as the ability to learn, reason and solve problems, which as a result, has the capacity to transform traditional teaching methodologies into a more personalized approach, at the level of ELT. A personalized and technologically integrated pedagogy has the ability to alleviate the learners' language anxiety to the extent that it becomes a motivational tool in the acquisition of the language. This has transformed the role of teachers in language pedagogy, and as part of the broader integration of AI into teaching, the ELT no longer has to spend the overwhelming part of the teaching day on designing a lesson and supervising the class. They are able cope with the more entrepreneurial and less routine pedagogical roles of a teacher.

While sophisticated AI technologies continue to emerge, relevant research studies witness substantial growth. The progress in AI focused on the emergence of transformational architecture and the broad accessibility of tools like ChatGPT. Advancements in AI continue to witness the spread of research on the uses, implications, and trends of AI in education, particularly in Teaching English as a Language. The initial focus of research on the capability of AI to alleviate the work burden of teachers in the sub-skills of a language like speaking, listening, and writing, and vocabulary and grammar. Tailored learning systems and intelligent tutoring systems are created using automated solutions that include natural language processing, speech recognition, and deep learning.

The cutting-edge tools of artificial intelligence support all four of the language skills of listening, speaking, reading and writing. With respect to the productive skills of writing and speaking, the AI tools provide support for writing sentence, paragraphs, and simple memoirs, and, also suggest the skills to be practiced to support the improvement of writing speaking at higher levels. In the productive skill of speaking, ELSA speaks and gives feedback on aspects such as speaking the right level of tone, speed and clarity of the message so that the message

does not get lost. ELSA also serves those learners who do not have the opportunity to experience speeches of native speakers. In the case of writing and speaking, the tools such as Grammarly offer support for the writing and also provide the feedback on the writing Grammers so that the writing becomes polished. In the case of writing and speaking, the tools such as Grammarly offer support for the writing and also provide the feedback on the writing Grammers so that the writing becomes polished. In the listening skills, tools such as Duolingo and others encourage the the learners to listen and to support improvement at all levels of the listening continuum.

While there is great potential in using AI in education, it can be difficult to implement due to digital inequity, ethical concerns, etc. From a practical viewpoint, digital inequity presents significant challenges. Low access to digital technology, high-speed connectivity, and specialized systems can hinder the adoption of necessary specialized digital education technologies and thus can worsen the digital inequity in education. From a pedagogical viewpoint, the potential misuse of AI technologies, including generative tools for plagiarism and surface-level automated responses, can also be a cause of concern. There is also the risk of learners becoming dependent on such technologies. It can result in the diminishment of critical and independent writing skills. Equally concerning are the ethical issues mainstreamed in the technology, including the bias in algorithms and the potential misuse of sensitive data related to learners. The significant inequities advanced by automated technology tools, e.g., the voice and accent recognition systems, which prejudge the standard of an automated voice control tool, also worry educators and policymakers. Finally, many educators indicate a lack of adequate professional development on using such technologies as a barrier to the integration of AI in education.

Given the interrelation of rapid technological advancement, proven pedagogy, and major ethical and practical challenges, the state of the art needs to be systematized, and this review aims to chart the tools and applications used in ELT and assess the impact of these tools in

pedagogy. ,,,, Furthermore, this review intends to articulate the impact of these tools in pedagogy and the benefits, challenges, and the relevant ethical implications and, this review aims to provide actionable recommendations to help educators and policy makers practice inclusive ethical integration of AI in pedagogy of language education.

4 .Objective of the Study

1 .Examine and substantiate the range of AI tools and generative applications, still in practice, that are exclusively tailored to the pedagogical practice of teaching English language learning .

2 .Determine the impact of the use of such AI tools on the processes and outcomes of essential pedagogy, measurable in learner engagement, motivation (L2 motivation), language proficiency in the second language (L2), and overall advancement in the language overall .

3 .Determine and analyze the major benefits, the technological and pedagogical challenges, and the predominant ethical issues on the integration of AI in English Language Teaching, such as data privacy, algorithm bias, and over dependence by the learner.

5 .Significance of the study

Addressing gaps in effective teaching practices and challenges surrounding the use of AI in ELT is important and is explained in this systematic review. It collects and assesses the dispersed body of literature regarding AI in ELT. This review can serve educators and administrators by presenting facts about and evidence from the literature regarding the use of AI in ELT to aid in the design of blended learning environments and digital literacy, as well as in the application of evidence-based teaching practices. It will assist policymakers by advocating for much-needed protected funds for teacher training to address the digital divide and for ethically responsible and safe practices regarding people's data. This study highlights the trends and the less explored areas, such as receptive skills and their long-term

effects, to guide future studies focused on the use of AI for increased student learning outcomes.

6 .Statement of the Problem

While there is recognition of the capacity of AI to change the face of English Language Teaching (ELT) through the provision of immediate personalised feedback, a real understanding of AI's potential, practical use and the benefits it may deliver has not yet been fully developed. Many studies completed to date have not attempted breadth in the systematic consideration of tools and/or applications and the concomitant pedagogy and outcomes in a range of settings. The increasing use of technologies such as ChatGPT raises problems of academic integrity, privacy, and algorithmic discrimination and has a need for responsible use and policy development. In addition, the persistent problems of institutional technical infrastructure, the digital divide, and teacher AI illiteracy are major barriers to the responsible and effective use of these technologies in the classroom .

7 .Research Questions

1 .Which AI tools and applications designed specifically to enhance English language learning are available?

2 .What impact do these AI applications have on particular ELT pedagogy and learning outcomes?

3 .What are the benefits and challenges, and the major ethics of using AI in English Language Teaching?

- **Literature review**

1:Benefits of Personalized Learning and Motivation AI undeniably reshapes and revolutionizes the ELT industry through the provision of personalized and adaptive learning experiences. Employing tools such as customized chatbots and generative AI (GenAI) with adaptive language learning systems attend to the individual learner needs, elevating intrinsic motivation, self-confidence, and participation while alleviating the foreign language

anxiety,,, and AI often serves as a personal tutor, perpetually altering the level of challenge of the tasks, and providing customized assignments and adaptive learning routes that are tailored to one's cognitive and proficiency levels.

:2 Enhancing Productive Skills: Writing and Immediate Feedback There is ample assistance offered by AI for the productive language skills, most particularly writing, which is the most reported area of focus. Immediate feedback on the level of grammar, sentence construction, style, and appropriate word choice is often offered by like Grammarly and other tailored AI writing assistants, which aids learners in the rapid identification and correction of mistakes \,.. This is in turn, the enhancement of academic writing to a higher level of writing with increased syntactic complexity, higher lexical diversity, improved overall efficiency and confidence.

3 **:**Enhancing Productive Skills: Speaking and Pronunciation. ELSA Speak and Google's Speech to Text APIs are examples of AI applications that provide precise feedback within milliseconds about one's intonation, fluency, pitch, and phonetics, as well as guide the user through difficulties in correcting pronunciation using SRT. AI also provides simulated conversations to assist in practicing real-time dialogue in a safe environment that is especially useful for learners with inadequate access to conversations with native speakers.

:4 Pedagogical Efficiency and Automated Assessment. AI enabled technologies improve educational outcomes as they alleviate the burden of administrative and operational automation on educators, particularly in the area of feedback provision and formative assessments, allowing for a more efficient distribution of time to the more intricate and personalized aspects of teaching, such as incorporating design thinking, facilitating Socratic dialogues and personalized instruction to the individual learner. AI is also used in language pedagogy for rapid feedback on learner performance to ensure consistency in formative assessments, something that is vital in large classrooms.

5 :Challenges: Over-reliance and Academic Dishonesty One of the most cited challenges has been the potential of students developing an over-reliance on AI tools for the completion of their assignments stunting their development of critical thinking, creativity, and independent problem-solving skills that are necessary for true language acquisition,,. This over-reliance has direct consequences with academic dishonesty, plagiarism, and cheating being flagged as primary issues that warrant the need of external protective measures such as policy enforcement and the implementation of plagiarism detection tools.,,

6 .Ethical Challenges: Bias and Privacy The introduction of AI is fraught with important ethical challenges and concerns, particularly with respect to bias and privacy. The law is breached on data privacy when sensitive user data such as written samples, behavior data, and voice recordings are collected and stored with little security, and even with none that is transparent,. AI discrimination is problematic on the grounds that poorly curated datasets may result in AI systems that are incapable of recognizing or adapting to atypical accents and other regional dialects, thereby unfairly discriminating and marginalizing low represented and diverse learners of the system, and is a problem with algorithm design that is recognized.,

7 :Challenges: Teacher Preparedness and Institutional Support While the successful integration of AI depends on teachers, many teachers report feeling unprepared, unfocused, and lacking the necessary technical skills and the digital literacy needed to implement these new and sophisticated tools and pedagogy effectively. This gap indicates the need for more consistent institutional support, especially funding for infrastructure, technical support, and deliberate improvement and training programs on the use and ethical practice of AI in the classroom.

- **Methodology**

This research employed a systematic literature review (SLR) methodology, using a systematic literature review (SLR) methodology, using a systematic literature review (SLR)

methodology, using a systematic literature review (SLR) methodology, using a systematic literature review (SLR) methodology using preferential reporting (PRISMA) standardized guidelines to maximize transparency and methodological rigor. This process is guided by systematic identification and screening, followed by a qualitative review of articles indexed in peer-reviewed journals available in reputable international databases, such as Scopus, WoS, Science Direct, and ERIC. The search strategy employed specific Boolean keyword phrases such as, \"Artificial Intelligence,\" \"English Language Teaching,\" AI tools for ELT, and variants thereof. Inclusion criteria focused on specific studies published in a defined recent timeframe, within ten years, from 2014 to 2024 (or, 2020-2024), and those that had frameworks on specific AI tools, their interventions, and, or models in English language learning and teaching. The articles were subjected to thematic qualitative analysis and synthesis of findings to uncover patterns of tools, their instructional applications, invaluable potentials, and existing challenges, and to illuminate themes of pedagogy, technology, and language instructional practices within the articles.

Results

This systematic review was conducted to identify the global trends, applications, and challenges in the integration of AI for the teaching and learning of the English language (ELL). The pool of data for review yielded several insights into publishing trends within various demographic, and the available instructional, and AI tools, and challenges.

Global and Temporal Trends

A dramatic shift in interest pertaining to AI and language education has occurred over the past few years. Of the 66 data points analyzed, 52 entries were published after 2023, corresponding to the increased interest in the deployment of generative AI tools, such as ChatGPT. Since 2017, the publication output has shown an increasing trajectory, which witnessed an acceleration post 2022. Asia surpasses the rest of the world in terms of publication volume, as it is responsible for over two-thirds (72%) of the published articles.

The first 3 most published articles' countries consist of China (14), Iran (4), USA (4), and close behind is Turkiye with (4). China has shown to still be on the top with generating 19% of the articles even in one review study.

Target Populations and Research Focus

Target students of higher education comprise the greatest population section, followed thereafter by practicing teachers (36%). There is a lack of peer-reviewed published research pertaining to K-12 (Elementary 7; Secondary 6) and an adult which consists of an English language learner (one article is found in one dataset). The focus of the theming of research has shown to represent mainly on the division which has an even percentage of 33% (improving language skills), teaching (27%) and addressing the teachers' standpoint.**(%14)**

Use of AI Applications and Tools

The overwhelming majority of AI applications focus on the development of productive skills, and of the four language skills, writing and speaking were the most studied (41% each). As for the receptive skills, vocabulary and listening, the absorption and receiving skills, were the least studied.

Some of the ways AI most positively influences language teaching are:

•Writing Assistance: In 54.55% of the articles, writing assistance refers to the support of correcting writing as well as looking for references.

•Language Assistance: In 50.00% of articles, this refers to support on the level of grammar and enhancement of vocabulary.

•Language Evaluation: In 45.45% of the articles, this refers to the capacity of AI to offer immediate feedback on the production of the language.

The most frequently mentioned AIs were Grammar Checkers/Writing Assistants and Chatbots/Virtual Assistants (63.63% each). Other tools cited with lower, although still notable, frequency were Language Learning Applications/Adaptive Learning Platforms and

Language Translation Tools (40.9% each). The number of studies on chatbots, in particular, increased from one before 2022 to seventeen in 2024.

Positive Impacts of AI Integration

Overwhelming evidence shows (with no exception of the studies) that the inclusion of AI in teaching positively influences the learners. AI Instruction Interventions research studies showed that experimental groups (with AI Instruction Interventions) outperformed the control groups in overall English learning as well as in skills such as grammar and vocabulary, reading comprehension, and writing in English.

Some challenges include technical breakdowns (22.73%), deficiencies in the digital skills (13.64%), and steep costs of implementation across the digital divide. \par 10. Discussion. \par An examination of the Application of Artificial Intelligence (AI) in English Language Teaching (ELT) as a field expanding in multiple directions as a result of the distinct opportunities it presents. However, there are still some fundamental challenges in ethics and pedagogy. We will examine the most important and most noticed trends in the field of pedagogy, the positive aspects, as well as the most important challenges to the effective use of AI. The Impact of AI on ELT Research.

The rise in the number of research papers published in the last 2 years (especially 2023, where 52 out of the 66 papers were published) is indicative of a significant change made possible with access to generative AI such as ChatGPT. The impact of this technology on research in the field continues to evolve, as previously published research systematic reviews that were mainly focused on Traditional Intelligent Tutoring Systems (ITS) are now being supplanted with the exploration of the human-AI collaboration interface with advanced chatbots. Research dominance in this field concentrated on Asia (especially China, Iran, and Taiwan) is indicative of the primary site of empirical testing and implementation (real-world application of the research). While it provides a rich empirical context to generate findings with large EFL learner populations, it brings to light concerns surrounding the extrapolation

of the findings to the West or other parts of the world. The exclusive focus on higher education learners and educators highlights a gap in research in the K-12 and adult education sectors, thus the need for new field studies to demonstrate a range of effective pedagogical courses that are claimed to be universal.

Educational Focus: The Dominance of Productive Skills

One of the most notable findings was the sheer volume of research centred around productive skills (speaking and writing), which accounted for 41% of all language skills research. This research focus is most aligned with the capabilities of the most popular AI tools such as Grammar Checkers/Writing Assistants and Chatbots. AI is particularly effective at tasks of grammatical correction and syntactical refinement in addition to conversational simulations. In writing, AI serves as in real-time editor, content creator, and feedback giver, all of which help tremendously increase the writing and fluency of the learner. In speaking, AI tools provide feedback in real-time on different components of speech such as pronunciation, pitch and rhythm. The tools serve as non-judgmental conversational partners, thereby mitigating anxiety in learners.

On the other hand, the apparent lack of focus on receptive skills (listening and vocabulary) constitutes an important gap. The most notable example of this is AI-driven spaced repetition (for example Quizlet), which is effective for vocabulary retention. The most sophisticated AI, however, has been under utilized for tasks that require listening comprehension at varying speeds and contexts. This suggests that while AI is effective for supporting learners in the output portion of language acquisition, its comprehensive support on other skills is substantially lacking due to the fact that listening is often the most unattained skill in language acquisition. This lack of support ultimately implies the need for innovative improvements within AI systems, particularly in listening to achieve true balanced systems.

The Transformative Potential

Rather than simply automating processes, artificial intelligence augments learning by personalizing instruction. AI analyzes student performance and customizes content, adjusts task difficulty, and provides individualized feedback, creating the personalized instructional learning vision that has previously not been feasible in large classes. Relating content and pacing to individual students, improves learning outcomes.

The motivation and engagement of students learning through artificial intelligence has been extensively documented. They find the learning to be intrinsically motivating, and the immersion from artificial intelligence encourages students to practice the language outside of a formal school setting. Vygotsky's ZPD could characterize the phenomenon, with the AI being a collaborator that scaffolds the learner to autonomy by internalizing the skills and moving through the ZPD. The AI tools promote self organized and self directed learning by removing the constraints of time and place.

Analysing Key Issues: Ethics, Bias and Implementation

While optimistic, a large number of systematic reviews bring to the forefront important foundational concerns that must be addressed for a truly ethical and sustainable implementation.

- Ethical Concerns: Academic Dishonesty and Over-reliance The issues of academic dishonesty (27.27%) and over-reliance on technology (27.27%) remain the most reported academic risks. The over-reliance on AI tools students use to compose sentences and complete assignments can be detrimental to their thinking, creativity, and articulation. The primary concern stems from moving student usage from passive content generation to active content engagement, which positions the AI as a cognitive aid rather than a complete substitute.
- Algorithmic Bias and Linguistic Standardization AI systems exhibit the same biases as the data subset, leading to problems of algorithmic bias and a deficit of cultural empathy (18.18%). A central observation is that generative AI detectors have a tendency to

misclassify the written output of non-native speakers as AI-generated, indicating a bias ingrained in models syncretic to a standard written English corpus. This bias potentially overcorrects legitimate students and further entrenches the language standardization hypothesis. The issue is more pronounced around cultural and local essential communicative devices. A solution based on the prioritization of dataset richness is required.

- **Teacher Preparedness and the Digital Divide**

AI-pedagogy integration depends on many things; the most important is the educator. While integrating AI tools, understanding analytics. designing blended learning models, and other components, most educators report feeling underprepared or experiencing forms of technostress. Neglecting the necessity of professional learning addressing the pedagogy and not just the tech will continue crippling the the paradigm-shifting potential AI holds.

Moreover, the substantial cost associated with the implementation of AI systems, together with the robust infrastructure required, contributes directly to the digital divide. Schools with fewer resources lack the appropriate hardware and support systems, leaving their students at a significant educational disadvantage compared to their peers.

Conclusion of Discussion

The Incorporation of AI into ELT has begun to strengthen positive outcomes in the areas of ELT personalization, motivation, and learner achievement. Extant literature, especially in the Asian and tertiary education contexts, describes and evidences a plethora of benefits, especially in the use of productive skill chatbots and writing aids. However, the need to use AI in ELT is dire, and so is the need to mitigate it concerning tools, training, and infrastructure. AI should complement the work of teachers, not presumed to supplant their work.

- **Summary (Conclusion) and Recommendations**

The integration of Artificial Intelligence (AI) and generative AI tools into English Language Teaching (ELT) has caused an initial shift in the paradigm with some promising advantages

that would have otherwise been difficult to obtain with earlier teaching methods. This review demonstrates that AI positively impacts the learning of the English language at various levels by providing customized instructions, elevating learning motivation, assisting the individual to become more self-regulated, and facilitating the achievement of the learner in different language integration skills including grammar, vocabulary, reading, and writing in the English language. Currently, AI tools including chatbots and grammar checkers are at the forefront of assisting learning in writing and speaking by providing instant feedback and being available as supportive conversational partners.

The rapid adoption and integration of AI into learning systems are balanced by still unresolved challenges, particularly the ethical dilemmas of academic misconduct, student over-reliance, and algorithmic bias that privilege some over others (especially non-native English speakers). There are additional challenges that are also relevant like the lack of teacher preparedness and the digital divide in low-access regions as a result of high costs of basic learning infrastructures.

The prevailing opinion within academia confirms the necessity of viewing AI as an adjunct of human teachers, rather than a substitution. In order to fully capitalize on AI's capabilities, stakeholders must move past the preliminary phases of research to focus on integration, addressing the strategy, ethics, and equity closure to ensure that the technology meets educational and human-centred values.

References

1 .Russell, S. J., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach (4th ed.). Hoboken: Pearson.

2 .McCarthy, J. (2007). From here to human-level AI. Artificial Intelligence, 171(18), 1174–1182.

3 .Jeon, J. (2022). Exploring AI chatbot affordances in the EFL classroom: young learners' experiences and perspectives. Computer Assisted Language Learning, 37(1–2), 1–26.

4 .Mohamed, A. M. (2023). Exploring the potential of an AI-based Chatbot (ChatGPT) in enhancing English as a Foreign Language (EFL) teaching: perceptions of EFL Faculty Members. Education and Information Technologies.

5 .Guo, K., Wang, J., & Chu, S. K. W. (2022). Using chatbots to scaffold EFL students' argumentative writing. Assessing Writing, 54, 100666.

6 .Hockly, N. (2023). Artificial Intelligence in English Language Teaching: The Good, the Bad and the Ugly. RELC Journal, 54(2), 445–451.

7 .Liang, J. C., Hwang, G. J., Chen, M. R. A., & Darmawansah, D. (2021). Roles and research foci of artificial intelligence in language education: an integrated bibliographic analysis and systematic review approach. Interactive Learning Environments, 31(7), 4270–4296.

8 .Chen, Y. (2022). Effects of technology-enhanced language learning on reducing EFL learners' public speaking anxiety. Computer Assisted Language Learning, 37(4), 789–813.

9 .Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT '21), 610–623.

10 .Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. Languages, 8(3), 212.

11 .Wei, L. (2023). Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. Frontiers in Psychology, 14:1261955.

12 .Gayed, J. M., Carlon, M. K. J., Oriola, A. M., & Cross, J. S. (2022). Exploring an AI-based writing assistant's impact on English language learners. Computers and Education: Artificial Intelligence, 3, 100055.

13 .Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. British Journal of Educational Technology, 55(6), 2503–2529.

14 .Fitria, T. N. (2021). Grammarly as AI-powered English Writing Assistant: Students' Alternative for Writing English. Metathesis: Journal of English Language, Literature, and Teaching.

15 .Hsu, T. C., Chang, C., & Jen, T. H. (2023). Artificial intelligence image recognition using self-regulation learning strategies: effects on vocabulary acquisition, learning anxiety, and learning behaviours of English language learners. Interactive Learning Environments.

16 .Lee, J. H., Shin, D., & Noh, W. (2023). Artificial Intelligence-Based Content Generator Technology for Young English-as-a-Foreign-Language Learners' Reading Enjoyment. RELC Journal, 54(2), 508–516.

17 .Liu, O. L., & Li, H. (2019). Artificial intelligence and language learning: A systematic review of the empirical literature. British Journal of Educational Technology, 50(2), 601-614.

18 .An, X., Chai, C. S., Li, Y., Zhou, Y., Shen, X., Zheng, C., & Chen, M. (2022). Modeling English teachers' behavioral intention to use artificial intelligence in middle schools. Education and Information Technologies, 28(5), 5187–5208.

19 .Punar Özçelik, N., & Yangın Ekşi, G. (2024). Cultivating writing skills: The role of ChatGPT as a learning assistant—a case study. Smart Learning Environments, 11, Article 10.

20 .Wang, X., Pang, H., Wallace, M. P., Wang, Q., & Chen, W. (2022). Learners' perceived AI presences in AI-supported language learning: a study of AI as a humanized agent from community of inquiry. Computer Assisted Language Learning, 37(4), 814–840.

21 .Chakravarti, S. (2023). Innovations in teacher development, personalized learning, and upskilling the workforce. IGI Global.

22 .Seo, K., Tang, J., Roll, I., et al. (2021). The impact of artificial intelligence on learner–instructor interaction in online learning. International Journal of Educational Technology in Higher Education, 18, Article 54.

23 .Akbarani, R. (2024). Use of artificial intelligence in english language teaching. International Journal of English Learning and Applied Linguistics (IJELAL), 4(1), 14–23.

24 .Li, X. (2017). The Construction of Intelligent English Teaching Model Based on Artificial Intelligence. International Journal of Emerging Technologies in Learning (iJET), 12(12), 35.

25 .Walker, M., Stent, A., Mairesse, F., & Prasad, R. (2007). Individual and domain adaptation in sentence planning for dialogue. Journal of Artificial Intelligence Research, 30, 413–456.