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AI Tools for Personalized English Learning: Bridging the Gap Between Technology and Language Acquisition

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Abstract

Language learning has become increasingly effective with the support of artificial intelligence, particularly in English language learning contexts. This study aims to explore how English as a Foreign Language learners utilize artificial intelligence to support personalized learning and to examine their perceptions of this technology. The study employed an explanatory sequential mixed methods design, beginning with quantitative data collection followed by qualitative exploration. Quantitative data were collected through a structured questionnaire involving 200 undergraduate learners from the English Education Department of a public university in Indonesia, while qualitative data were obtained through semi structured interviews with 10 selected participants. Quantitative data were analyzed using descriptive statistics and qualitative data were examined through thematic analysis. The findings indicate that artificial intelligence features such as real time feedback, adaptive content, voice recognition, and gamified tasks contribute to improvements in learners' writing, reading, speaking, and listening skills. In addition, artificial intelligence provides interactive and accessible learning support that allows learners to engage flexibly in personalized learning. However, limitations related to meaningful interaction and contextual understanding remain challenges when artificial intelligence is not used judiciously.

Keywords: Personalized learning, AI, English language learning, EFL learners

Abstrak

Pembelajaran bahasa menjadi semakin efektif dengan dukungan kecerdasan buatan, khususnya dalam konteks pembelajaran bahasa Inggris. Penelitian ini bertujuan untuk mengeksplorasi pemanfaatan AI oleh Pembelajar Bahasa Inggris bagi Penutur Asing dalam mendukung pembelajaran yang dipersonalisasi serta mengkaji persepsi mereka terhadap teknologi tersebut. Penelitian ini menggunakan desain metode campuran dengan pendekatan explanatory sequential, yang diawali dengan pengumpulan data kuantitatif dan dilanjutkan dengan eksplorasi kualitatif. Data kuantitatif diperoleh melalui kuesioner terstruktur yang melibatkan 200 mahasiswa Program Studi Pendidikan Bahasa Inggris di sebuah universitas negeri di Indonesia, sedangkan data kualitatif dikumpulkan melalui wawancara semi terstruktur dengan 10 partisipan terpilih. Data kuantitatif dianalisis menggunakan statistik deskriptif dan data kualitatif dianalisis melalui analisis tematik. Hasil penelitian menunjukkan bahwa fitur AI, seperti umpan balik secara langsung, konten adaptif, pengenalan suara, dan tugas berbasis gamifikasi, berkontribusi terhadap peningkatan keterampilan menulis, membaca, berbicara, dan menyimak. Selain itu, AI menyediakan dukungan pembelajaran yang interaktif dan mudah diakses sehingga memungkinkan pelajar belajar secara fleksibel. Meskipun demikian, keterbatasan dalam interaksi bermakna dan pemahaman konteks masih menjadi tantangan apabila AI tidak digunakan secara bijak..

Kata kunci: Pembelajaran yang dipersonalisasi, AI, pembelajaran bahasa Inggris, pelajar EFL

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INTRODUCTION

Artificial intelligence has become a defining element in current English language learning practices, reshaping instructional approaches, learner engagement, and the ways linguistic support is delivered in educational settings. AI-based technologies have introduced new opportunities to design learning environments that are more adaptive, personalized, and responsive to individual learner needs. In the context of English as a Foreign Language (EFL), AI has been increasingly recognized for its ability to offer targeted feedback, detect learning gaps, and assist learners in developing their linguistic competencies more effectively (Yeh, 2024). These advancements align with contemporary educational demands for individualized instruction and learner autonomy.

Personalized learning, which refers to an instructional approach that is tailored to meet the diverse needs, skills, and learning paces of individual learners, has long been considered essential in language education (Inthanon & Wised, 2024). Learners encounter different linguistic, cognitive, and affective challenges. AI-powered tools address this by analyzing learners' performance data and adapting instruction accordingly. Utilizing advanced technologies such as speech recognition, automated writing assessment, and Natural Language Processing (NLP), these tools go beyond simple error correction. They provide learners with rich, actionable insights into their performance, enabling them to recognize their weaknesses, reflect critically, and develop strategies to enhance their learning (Zhang et al., 2024).What once required extensive human tutoring is now increasingly accessible through intelligent systems.

Despite the recognized value of personalized learning in EFL education, its implementation through AI mediated practices remains insufficiently understood. Existing research on personalized learning has largely focused on instructional differentiation, adaptive materials, and learner pacing within teacher directed or curriculum based frameworks. While these studies highlight the importance of addressing individual learner differences, they offer limited insight into how personalization is experienced by learners when it is facilitated through AI tools. Within the growing body of AI related research, scholarly attention has predominantly emphasized technical capabilities or general effectiveness in language acquisition, with relatively little focus on learners' real world engagement with AI in personalized learning contexts (Ellikkal & Rajamohan, 2025; Vieriu & Petrea, 2025). In addition, practical barriers such as limited teacher preparation, unequal access to digital infrastructure,

and uncertainty in aligning AI tools with national curricula continue to influence classroom adoption. Consequently, empirical evidence from the learners' perspective remains limited, leaving a critical gap in understanding how AI can effectively support individual learning trajectories.

This research introduces a learner centered perspective that remains underrepresented in current literature. Its findings are expected to provide practical implications for educators, technology developers, and policymakers seeking to promote more effective and equitable integration of AI in language learning. By illuminating how learners experience and respond to AI enhanced instruction, the study aims to inform future innovations in curriculum design and educational technology development, contributing to the advancement of learners centered language education in the digital age.To address the identified research gap, this study explores how EFL learners engage with AI powered tools in their English learning processes and examines their perspectives on the role of AI in facilitating personalized learning. Accordingly, the study is guided by the following research questions:
RQ1. How do EFL learners use AI tools in their English learning processes?
RQ2. What are EFL learners' perspectives on the role of AI tools in facilitating personalized learning?

RESEARCH METHODS

This study employed an explanatory mixed-methods design using an explanatory sequential design, in which quantitative data collection was conducted in the first phase and qualitative exploration in the second phase. This design allowed the researchers to collect statistical patterns first and then explore them further through in-depth insights, ensuring a comprehensive understanding of the research problem (Creswell & Plano Clark, 2018). The combination of both data types enabled triangulation and enhanced the validity of the findings (Tashakkori & Teddlie, 2010). The research was conducted in the English Education Department of a public university in Indonesia. The participants were 200 undergraduate learners aged 18 to 23. The sample was selected through purposive sampling, a technique that allowed the researchers to select participants who possess specific characteristics relevant to the research objectives (Fraenkel et al., 2012). The criteria included learners who had used AI tools for language learning, either in formal or informal settings. Prior to data collection, informed consent was obtained from all participants, ensuring ethical research practices.

Data was collected in two stages. First, the researchers developed a structured questionnaire comprising 20 closed-ended items organized into five sections: demographic information; frequency and types of AI tool use; impact on language skills; motivation and engagement; and personalized learning. The questionnaire was created in Google Forms and distributed online, enabling efficient data collection and broad participant reach. This phase aimed to provide a general overview of learners' engagement with AI tools in their English learning process. A pilot study with a small sample was conducted before the main data collection to ensure the questionnaire was reliable. The researchers used Cronbach's alpha to assess internal consistency and reliability, and it yielded an adequate coefficient ($\alpha > 0.70$), indicating the instrument is reliable. Based on the pilot findings, small changes were made to clarify and improve coherence. These steps made the questionnaire more reliable and consistent for later data processing.

In the second phase, the researchers conducted semi-structured interviews with 10 participants. The interviews aimed to explore learners' experiences, perceptions, and attitudes regarding AI-based learning tools, particularly in supporting autonomous and personalized learning outside the classroom. The use of semi-structured interviews allowed for flexibility and depth in the

conversation while still focusing on key themes (Merriam & Tisdell, 2016). Interviews were conducted in Bahasa Indonesia, the participants' native language, to ensure clarity and comfort during the discussion.

For the quantitative data analysis, the researchers used descriptive statistics in Microsoft Excel to examine frequencies, percentages, and trends in responses. This statistical approach is suitable for summarizing and describing the general patterns in the dataset (Muijs, 2011). Visual representations, such as tables and graphs, were used to enhance clarity in data presentation. The qualitative data from the interviews were transcribed verbatim, ensuring that all verbal expressions, including pauses and fillers, were accurately recorded (Halcomb & Davidson, 2006). The researchers then employed thematic analysis following the systematic procedures proposed by Braun and Clarke (2006). This process began with familiarization with the data through repeated reading of the transcripts, followed by the generation of initial codes that captured meaningful aspects of the data relevant to the research questions. The codes were subsequently examined and organized into potential themes by identifying recurring patterns across participants' responses. These themes were reviewed and refined to ensure coherence and clear distinctions, then defined and named to reflect their core meanings. The final themes were interpreted and reported using representative excerpts, enabling the qualitative findings to reveal patterns and deeper meanings in participants' experiences and to complement the quantitative phase's results.

RESULTS AND DISCUSSION

The Way EFL Learners Leverage AI Tools to Enhance Their Personalized Learning Experience

AI tools transform the way EFL classrooms work by providing more personalized learning opportunities. These tools improve learners' efficiency and enjoyment in their language learning process by adapting to each learner's individual preferences. AI encourages learners to engage more deeply with personalized content by creating a dynamic, flexible environment. Learners are encouraged to fully interact with personalized content, which encourages a sense of control over the learning process (Kristiawan, 2024). This sense of control leads to increased motivation and self-esteem, which are further supported by feedback features that help learners monitor their learning progress.

AI tools personalize the learning process by analyzing individual performance data to identify strengths and weaknesses. AI is programmed with Intelligent Tutoring Systems (ITS) that offer targeted practice and personalized learning in an attempt to deliver a supportive environment for learners (Son et al., 2023). As stated by Losi et al. (2024), AI tools are a transformative force as they can easily identify grammatical patterns, sentence errors, and vocabulary style. Additionally, features such as real-time feedback, voice recognition, adaptive testing, and gamified tasks make learning more accessible, engaging, and enjoyable. While accommodating diverse learning styles and paces, these innovations assist learners in maintaining their motivation and engagement. With the development of AI tools, learners will have more opportunities to engage with language in valuable and personalized ways.

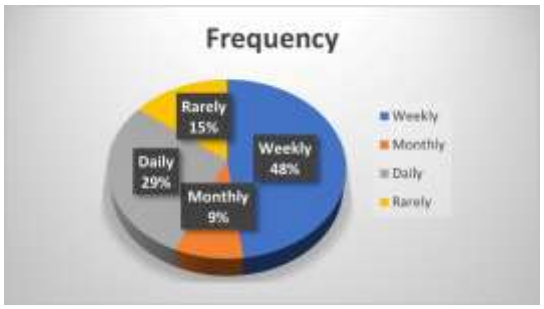

Figure 1. Frequency of Using AI Tools

Figure 1 illustrates that personalized learning in EFL classrooms does not rely merely on AI tools. In line with that, 48% use AI weekly, 29% daily, 15% rarely, and 9% monthly. This shows that although AI is becoming increasingly integrated into language learning, it primarily serves as a supplementary tool. Furthermore, even though AI is helpful to educators and learners, it cannot replace human interaction and decision-making, as evidenced by its high daily and weekly usage. Prior studies have highlighted several ways in which NLP supports learning and provides learners with feedback. NLP is capable of rendering things possible for computer systems to autonomously generate activities that resemble the conventional teaching techniques, such as asking and evaluating (Chinkina et al., 2020). Its use in EFL classrooms has the potential to significantly enhance personalized learning. Regarding the data, 48% of learners use AI tools weekly, and 29% use them daily, reflecting a growing dependence on technology. However, since a substantial portion still use AI rarely, human interaction in conventional teaching remains crucial. Moreover, NLP tools deliver instant feedback and adaptive assessments that align with learners' performance levels, ensuring continuous, personalized learning progress.

According to a study conducted by Son et al. (2023), AI is empowered by ITS, computer programs that provide users with personalized, interactive tuition without the need for human operators. ITS represents one of the most notable applications of AI in language learning. Designed to support effective EFL acquisition, ITS can function as a stand-alone tool or as a supplement to traditional teaching methods (Choi, 2016). These systems leverage growing familiarity with digital technology to deliver compact, engaging learning experiences. Certain types of ITS employ engine learning and AI algorithms to adapt to the specific needs of the user, enhancing the personalization of the learning experience (Jiang, 2022).

While AI is increasingly used in education, it has not yet taken over, and personalized learning remains primarily led by human instruction. Shin (2018) suggests that while AI has the potential to enhance learning quality, it should serve to complement rather than replace traditional teaching methods. Despite its growing presence, AI tools have not yet become the dominant approach in EFL classrooms. Personalized learning remains fundamentally human-centered, with AI functioning as a supportive tool for conventional instruction. To maximize the effectiveness of language acquisition, it is important to balance technological advancements and human interaction, especially as AI continues to evolve.

Table 2.
Types of AI tools

Type	Percentage	Function in ELL
Chatbots	39%	Delivering immediate feedback, engaging conversational practice, and tailored responses for oral and written proficiency
Language learning apps	34%	Facilitating vocabulary enhancement, grammatical exercises, and gamified educational activities
Virtual tutors	10%	Providing guided explanations and customized learning trajectories
Speech recognition tools	8%	Enhancing pronunciation, fluency, and auditory precision using voice-generated feedback
ChatGPT	6%	Facilitating idea formulation, writing refinement, and language clarification
Blackbox.ai	3%	Facilitating problem-solving and language comprehension using AI-assisted answers

Table 2 shows the types of AI tools most commonly used by learners to study English, especially in developing core skills such as speaking, reading, writing, and listening. The result indicates that 39 percent of learners prefer using chatbots over other AI tools. This is because chatbots are easy to access, provide relevant answers, and offer helpful feedback on learners' progress. Chatbots are particularly useful in English learning because they can give instant feedback and adjust their response to fit the individual needs of each learner.

English language acquisition involves four fundamental skills: speaking, listening, writing, and reading. In terms of speaking skills, AI chatbots have proven effective as learning aids, offering an interactive experience through audio and video. Han (2020) found that the use of voice-based chatbots improved the speaking competence and affective aspects of middle school learners in Korea. In addition to boosting confidence, chatbots also encourage positive engagement. In listening skills, a study by Jehma and Akaraphattanawong (2023) showed that the use of VRChat in virtual learning improved the listening skills of university learners in Thailand, with a video game-like interface that participants liked. In the development of reading skills, the AI acts as a personal tutor, providing practice and corrective feedback. Yin and Hanif (2024) showed that the use of MUETbot improved the reading skills of ESL learners through a personalized and interactive learning experience. In line with these findings, Herda et al. (2024) stated that ChatGPT, with its adaptive and original conversational character, is effectively used as a writing learning medium that is fun and satisfying for users.

Table 3.
Language Skills

Language Skills	Result	Percentage
Listening	Somewhat helpful	40,50%
Speaking	Somewhat helpful	43,50%
Reading	Somewhat helpful	45%
Writing	Very helpful	42%

As shown in Table 3, 200 respondents (N=200) perceive AI tools' impact on language skills. Listening was considered "somewhat helpful" by 40.50% of participants, suggesting moderate support. Speaking received a slightly higher rating at 43.50%, indicating some improvement in fluency and

pronunciation. Reading had the highest percentage in this category, with 45% acknowledging AI's role in improving comprehension and vocabulary. Writing was notably rated as "very helpful" by 42%, highlighting AI's substantial contribution to grammar, structure, and coherence. It shows writing as the most supported skill, followed by reading, speaking, and listening.

AI tools were regarded as "somewhat helpful" in enhancing listening skills, with 40.50% of respondents acknowledging their positive impact. This suggests that while AI does provide meaningful assistance, its effectiveness in improving listening comprehension is still constrained. AI-driven platforms provide users with personalized listening exercises that can cater to different proficiency levels, such as listening to conversations or lectures at varying speeds (Jegede, 2024). However, these tools still cannot replicate the full complexity of real-world listening situations, such as understanding accents, emotional tones, or contextual nuances (Abdellatif et al., 2024). For example, although AI can slow down speech for beginners, it still struggles to replicate more challenging scenarios, such as noisy environments or informal, spontaneous conversations. These aspects, which require interpreting natural speech patterns, are challenging for AI to imitate accurately, underscoring the need for more varied listening experiences.

Moreover, AI tends to overlook subtle elements of communication, such as sarcasm, emotional expression, or tone, which are crucial for understanding underlying meanings. While it can aid with basic pronunciation and vocabulary recognition, it cannot convey the emotional and social signals that are essential in authentic conversations. As a result, AI provides foundational assistance in listening comprehension, but its limitations in reflecting authentic human interaction highlight the need for integration with more natural and varied listening experiences. Therefore, learners are encouraged to supplement AI-based practice with more natural and diverse listening exposure.

Similar to listening skills, AI tools were also seen as "somewhat helpful" in improving speaking skills, with 43.50% of respondents recognizing their value. This indicates that although AI supports learners in technical aspects such as pronunciation and intonation, it cannot replicate the dynamic nature of real-world communication. Tools like ELSA Speak or Speechling provide instant feedback on speech clarity and rhythm. However, AI tools tend to focus on structured exercises that do not fully replicate the unpredictable, spontaneous nature of human conversation (Halonen et al., 2023). In everyday communication, speakers often encounter unexpected topic changes, humor, and informal language, areas that current AI systems cannot handle effectively. This limitation reduces AI's effectiveness in fully preparing learners for real-world social or professional interactions.

Moreover, AI tools do not fully address the emotional and social dimensions of speaking (Hohenstein et al., 2021). As highlighted by Akdilek et al. (2024), effective speaking also involves recognizing emotional cues such as tone and body language, which AI is not yet capable of imitating. For example, an AI tool may not be able to teach learners how to vary their intonation appropriately when offering an apology or expressing gratitude. While AI tools are useful for practicing speech accuracy and improving articulation, they cannot provide meaningful feedback on the subtle elements of human interaction that are essential for successful communication in a variety of real-life situations.

Similarly, AI tools were seen as "somewhat helpful" in enhancing reading skills, with 45% of respondents recognizing their contribution. This suggests that AI can support learners in better understanding texts by providing instant word meaning or context-based explanations. However, it may fall short in encouraging deeper levels of critical thinking and analysis. For example, the platform LingQ allows learners to listen to readings while receiving definitions for unfamiliar words, which aids

in vocabulary development. However, AI tools often focus on surface-level comprehension, such as word recognition and basic understanding, and do not encourage readers to engage critically with the material (Ademola, 2024; Van Le et al., 2024; Xinhua, 2024). While AI can assess reading comprehension through quizzes or multiple-choice questions, it does not guide learners in making inferences or analyzing underlying themes in a text. Therefore, while AI helps build foundational reading skills, it does not replace traditional methods that foster higher-order thinking and analytical reading (Muthmainnah et al., 2022; Wu et al., 2024).

In addition, there is concern that excessive reliance on AI for reading might encourage passive learning, in which learners rely on quick answers rather than developing their own reading strategies. According to Doty and Lippien (2024), when learners turn to AI for immediate solutions, they may miss opportunities to engage critically with the content or explore it in more depth. While AI is useful for enhancing vocabulary and basic comprehension, it should be paired with conventional approaches that promote deeper, more active engagement with texts. Encouraging learners to think critically and reflect on what they read remains essential for developing strong and independent reading skills.

To understand EFL learners' perceptions of the role of AI in English language learning, this study examines how learners view the use of AI for personalized learning. Table 4 shows the results and percentages related to learners' perceptions of AI in controlling personalized learning, the frequency of AI use, and their self-reported confidence in AI's contribution to their language learning process..

Table 4.
Personalized Learning

Personalized Learning	Result	Percentage
Role of AI to control language learning	Agree	53,50%
Frequency of seeking additional resources outside AI	Occationally	65%
Belief of AI contribution for language learning	Agree	56%

The first item in Table 4 shows that 53.50% of respondents agree that AI is effective in managing personalized English language learning. Respondents believe that AI can develop learning plans, especially in personalized learning. AI can help create personalized learning plans for individual learners based on their individual needs, such as their strengths and weaknesses (Owan et al., 2023). Through data analysis, AI can identify areas that need improvement and provide appropriate guidance, with the successful use of Generative AI in project-based learning depending largely on teachers' active roles, their readiness in AI competence, and institutional support in the form of clear policies and professional development (Rukiati et al., 2023; Fitriyah & Ratnawati, 2025). For example, in improving writing or grammar, AI can provide feedback and corrections, along with guidance, to help learners become better. This proves that AI plays an important role in optimizing the English language learning experience.

These results are in line with a study conducted by Wei (2023), which states that AI can provide real-time feedback and content-dependent assessment. Customized content helps learners understand the material effectively and in a relevant way, while instant feedback allows them to identify and correct mistakes immediately. Additionally, the self-assessment feature enables learners to

evaluate their own understanding. This underscores the crucial role of AI in supporting targeted and personalized English language learning.

Although most respondents believe that AI has an impact on their personalized language learning experience, not all respondents use AI alone as a learning tool. The second item in Table 4 shows that 63% of learners seek additional resources besides AI. AI tools are highly effective but still have limitations because they do not cite sources for their answers, posing a risk of generating content that may require greater accuracy or truthfulness (Sain et al., 2023). For example, ChatGPT can provide incorrect information. Therefore, it is crucial for learners to evaluate AI responses critically and to avoid relying solely on AI. These limitations encourage learners to seek out other resources in their learning process.

AI also contributes to respondents' language learning. This is reflected in the third point in Table 4, where 56% of respondents believe that AI contributes to their English language learning. AI offers a range of features and advantages that help learners improve their language skills. A previous study by Wei (2023) found that AI acts as a catalyst for intrinsic motivation, creating a positive, supportive educational environment that empowers learners, alleviates their anxiety, and fosters intrinsic motivation. AI's contribution helps EFL learners build confidence and stay motivated in their learning. The 24/7 AI support available, such as ChatGPT, also enhances their productivity in honing their language skills. Nugroho et al. (2023) state that ChatGPT is useful for practicing writing, enriching vocabulary, preparing learning materials, and practicing conversations. This reinforces nwrs' belief in the role of AI in their English language learning process.

EFL Learners' Perception of Using AI Tools for Personalized Learning

EFL learners' perceptions of using AI tools for personalized English learning revealed a range of interconnected experiences that reflect both affective and cognitive dimensions of language learning. Learners did not perceive AI merely as a technological supplement but rather as a learning companion that reshaped how they engaged with English beyond formal classroom settings. These perceptions illustrate how AI supported environments can influence learners' motivation, confidence, and sense of responsibility in managing their own learning processes.

One prominent aspect of learners' experiences involved the emotional comfort provided by AI tools. Learners described AI mediated learning as a low-pressure environment where they could practice English without fear of embarrassment or negative evaluation. This emotional safety was particularly important when working on pronunciation and grammatical accuracy, areas that often trigger anxiety in traditional classrooms. By reducing stress and performance pressure, AI tools encouraged learners to engage more freely and consistently with learning tasks, contributing to sustained motivation.

> "I honestly find AI tools to be useful. Like several applications, I have been using to improve grammar and pronunciation. Using AI technologies helps me to relax. Practicing free from the demands of a classroom environment or under constant stress about making mistakes in front of others is good." **– P1**

> "Learning English has surely become less stressful thanks to artificial intelligence. I can practice whenever and it seems more like a laid-back hobby than something official. I appreciate it more in that laid back environment." **– P7**

Beyond emotional relief, learners emphasized the role of AI tools in fostering confidence and learner empowerment. Interactions with chat based AI systems allowed learners to progress at their own pace and experiment with language without feeling judged. This experience supported gradual confidence building, especially in communicative contexts where learners often hesitate to speak. As learners became more comfortable making mistakes and receiving immediate feedback, they reported a stronger sense of control over their learning and greater willingness to engage independently.

> "I can go slowly. If I make a mistake, I am not ashamed. Using chatbots helps me develop my confidence to communicate as it feels like chatting to someone. I can make mistakes and yet grow, so I do not feel judged." **– P3**

Learners also reported that AI tools promoted reflective and analytical engagement with language use. Several participants noted that AI systems often provided multiple explanations or alternative responses to a single query. Rather than accepting these responses passively, learners described evaluating and comparing them, which encouraged greater awareness of language structure and word choice. This reflective process supported deeper cognitive engagement and helped learners become more conscious of how they constructed meaning in English.

> "Sometimes AI tools respond to one inquiry with several replies or explanations, which makes me wonder whether I would be more critical and wiser. I value how it helps me to notice how I utilize my own words." **– P5**

> "Artificial intelligence techniques force me to consider the phrase more closely. Better still, it motivates me to approach things analytically." **– P7**

Flexibility and accessibility also shaped learners' positive perceptions of AI assisted learning. Learners valued the ability to practice English anytime and in various contexts, allowing language learning to become part of their daily routines rather than being limited to scheduled classroom activities. This accessibility supported personalized learning by enabling learners to align practice with their individual needs, interests, and availability, reinforcing autonomy and sustained engagement.

> "It is important that learners practice anywhere and anytime is great for English skills. I think it is more practical." **– P5**

Taken together, these findings suggest that AI tools support personalized English learning by reducing anxiety, enhancing confidence, encouraging reflective language use, and providing flexible access to practice opportunities. Learners' experiences indicate that AI can play a meaningful role in fostering learner centered learning when used as a supportive and complementary resource. At the same time, their reflections imply the importance of thoughtful pedagogical guidance to ensure that AI use aligns with broader learning objectives and supports sustained language development.

However, despite the meaningful insights generated by this study, several limitations should be acknowledged. The sample size was relatively limited and drawn from a specific group of EFL learners, which may restrict the broader applicability of the findings to other learning contexts or populations. In addition, the study relied primarily on learners' self-reported perceptions rather than objective

measures of language proficiency, which may introduce response bias. Furthermore, given the rapid development of AI technologies, learners' perceptions and patterns of use are likely to evolve over time. These considerations highlight the need for future research employing longitudinal and mixed methods designs to capture changes in learner engagement and to provide a more comprehensive understanding of the long-term impact of AI tools on English language learning outcomes.

CONCLUSION

The implementation of AI tools in English language learning has been a pivotal advancement, providing EFL learners with personalized and adaptive learning experiences. By customizing lessons and exercises to specific needs, preferences, and progress, AI tools support greater learner motivation, engagement, and self-esteem. This study revealed that features such as real-time feedback, interactive assessments, adaptive content, and speech recognition significantly supported improvements in speaking, writing, reading, and listening skills. Chatbots, in particular, were identified as the most popular AI tool due to their accessibility and interactive assistance, enabling learners to practice language skills anytime and anywhere. While AI offers notable benefits, it also has limitations in fostering authentic interaction and cultural understanding. Excessive reliance on AI may reduce learners' critical thinking and autonomy if not complemented by traditional teaching methods. Therefore, integrating AI into English language learning requires a balanced approach that enhances, rather than replaces, human instruction. This study offers valuable insights for educators, developers, and policymakers to design English learning environments that are flexible, adaptive, and aligned with the evolving needs of learners in the digital era.

RECOMMENDATION

Future researchers are expected to conduct experimental research on AI for personalized learning to add empirical evidence and deepen understanding of its effectiveness. Researchers should draw more specific conclusions and implement educational practices.

REFERENCES

Abdellatif, M. S., Alshehri, M. A., Alshehri, H. A., Hafez, W. E., Gafar, M. G., & Lamouchi, A. (2024). I am all ears: listening exams with AI and its traces on foreign language learners' mindsets, self-competence, resilience, and listening improvement. *Language Testing in Asia*, *14*(1). https://doi.org/10.1186/s40468-024-00329-6

Ademola, E. O. (2024). Reading Strategies in the AI Age: Enhancing Comprehension and Engagement with Advanced Technologies. *Advances in Multidisciplinary & Scientific Research Journal Publication*, *38*, 105–124. https://doi.org/10.22624/aims/accrabespoke2024p13

Akdilek, S., Akdilek, I., & Punyanunt-Carter, N. M. (2024). The Influence of Generative AI on Interpersonal Communication Dynamics. In *Advances in educational technologies and instructional design book series* (pp. 167–190). https://doi.org/10.4018/979-8-3693-0831-8.ch009

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Chinkina, M., Ruiz, S., & Meurers, D. (2020). Crowdsourcing evaluation of the quality of automatically generated questions for supporting computer-assisted language teaching. *ReCALL*, 32(2), 145–161. https://doi.org/10.1017/S0958344019000193

Choi, I. C. (2016). Efficacy of an ICALL tutoring system and process-oriented corrective feedback. *Computer Assisted Language Learning*, *29*(2), 334-364. https://doi.org/10.1080/09588221.2014.960941

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). SAGE Publications.

Doty, K., & Lipien, L. (2024). Learner Perceptions and Attitudes About the Usage of Chatgpt in Online K-12 Education and Learner Preferences About Learning to Use Artificial Intelligence from Teachers. *American Journal of Educational Research*, *12*(9), 348–355. https://doi.org/10.12691/education-12-9-2

Ellikkal, A., & Rajamohan, S. (2025). AI-enabled personalized learning: Empowering management learners for improving engagement and academic performance. *Vilakshan - XIMB Journal of Management, 22*(1), 28–44. https://doi.org/10.1108/XJM-02-2024-0023

Fitriyah, & Ratnawati. (2025). Investigating generative AI utilization for project- based learning : Teachers' role, challenges, and strategies in higher education. *Jurnal Wahana Pendidikan*, *12*(2), 285–300. https://doi.org/10.25157/jwp.v12i2.19776

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education* (8th ed.). McGraw-Hill Education.

Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary?. *Applied nursing research : ANR*, *19*(1), 38–42. https://doi.org/10.1016/j.apnr.2005.06.001

Halonen, N., Ståhle, P., Juuti, K., Paavola, S., & Lonka, K. (2023). Catalyst for co-construction: the role of AI-directed speech recognition technology in the self-organization of knowledge. *Frontiers in Education*, *8*. https://doi.org/10.3389/feduc.2023.1232423

Han, D. E. (2020). The effects of voice-based AI chatbots on Korean EFL middle school learners' speaking competence and affective domains. *Asia-pacific Journal of Convergent Research Interchange*, *6*(7), 71-80. http://dx.doi.org/10.47116/apjcri.2020.07.07

Herda, R. K., Travero, A. S., Kafabih, A., Koeswoyo, A. W., Sari, R. N., Hakiki, F. I., & Wahidah, N. (2024). Opportunities of using Chatgpt in academic writing: Perceptions of the Philippines and Indonesian learners. *Jurnal Wahana Pendidikan*, *11*(2), 205-214. https://dx.doi.org/10.25157/jwp.v11i2.14922

Hohenstein, J., DiFranzo, D., Kizilcec, R. F., Aghajari, Z., Mieczkowski, H., Levy, K., Naaman, M., Hancock, J., & Jung, M. (2021). Artificial intelligence in communication impacts language and social relationships. *arXiv (Cornell University)*. https://doi.org/10.48550/arxiv.2102.05756

Inthanon, W., & Wised, S. (2024). Tailoring education: A comprehensive review of personalized learning approaches based on individual strengths, needs, skills, and interests. *Journal of Education and Learning Reviews, 1*(5), 35–46. https://doi.org/10.60027/jelr.2024.779

Jegede, O. O. (2024). Artificial Intelligence and English Language Learning: Exploring the Roles of AI-Driven Tools in Personalizing Learning and Providing Instant Feedback. *Universal Library of Languages and Literatures*, *01*(02), 06–19. https://doi.org/10.70315/uloap.ullli.2024.0102002

Jehma, H., & Akaraphattanawong, A. (2023). VRChat as a virtual learning platform for enhancing English listening skills. *International Journal of Information and Education Technology*, *13*(5), 813-817. https://doi: 10.18178/ijiet.2023.13.5.1872

Jiang, R. (2022). How does artificial intelligence empower EFL teaching and learning nowadays? A review on artificial intelligence in the EFL context. *Frontiers in Psychology*, *13*, 1049401. https://doi.org/10.3389/fpsyg.2022.1049401

Kristiawan, D., Bashar, K., & Pradana, D. A. (2024). Artificial Intelligence in English Language Learning: A Systematic Review of AI Tools, Applications, and Pedagogical Outcomes. *The Art of Teaching English As a Foreign Language (TATEFL)*, *5*(2), 207–218. https://doi.org/10.36663/tatefl.v5i2.912

Losi, R. V., Putra, E., Ali, N., & Dewi, A. S. (2024). Using Artificial Intelligent (AI) to Improve EFL Learners' Writing Skill. *IJEAL (International Journal of English and Applied Linguistics).* 4(1). https://doi.org/ijeal.v4i1.3694

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation* (4th ed.). Jossey-Bass.

Muijs, D. (2011). *Doing Quantitative Research in Education with SPSS* (2nd ed.). SAGE Publications.

Muthmainnah, Ibna Seraj, P. M., & Oteir, I. (2022). Playing with AI to investigate human-computer interaction technology and improving critical thinking skills to pursue 21st century age. *Education Research International*, *2022*(1), 6468995. https://doi.org/10.1155/2022/6468995

Nugroho, A., Putro, N. H. P. S., & Syamsi, K. (2023). The Potentials of ChatGPT for Language Learning: Unpacking its Benefits and Limitations. *Register Journal*, *16*(2), 224–247. https://doi.org/10.18326/register.v16i2.224-247

Owan, V. J., Abang, K. B., Idika, D. O., Etta, E. O., & Bassey, B. A. (2023). Exploring the potential of artificial intelligence tools in educational measurement and assessment. *Eurasia Journal of Mathematics, Science and Technology Education,* *19*(8), em2307. https://doi.org/10.29333/ejmste/13428

Rukiati, E., Wicaksono, J. A., Taufan, G. T., & Suharsono, D. D. (2023). AI on Learning English: Application, Benefit, and Threat. *Journal of Language, Communication, and Tourism*, *1*(2), 32–40. https://doi.org/10.25047/jlct.v1i2.3967

Fitriyah, & Ratnawati. (2025). Investigating generative AI utilization for project- based learning : Teachers' role, challenges, and strategies in higher education. *Jurnal Wahana Pendidikan*, *12*(2), 285–300. http://dx.doi.org/10.25157/jwp.v12i2.19776

Sain, Z. H., Serban, R., Abdullah, N. B., & Thelma, C. C. (2024). Benefits and Drawbacks of Leveraging ChatGPT to Enhance Writing Skills in Secondary Education. *At-Tadzkir: Islamic Education Journal*, *4*(1), 40–52. https://doi.org/10.59373/attadzkir.v4i1.79

Shin, M. H. (2018). How to use artificial intelligence in the English language learning classroom. *Indian Journal of Public Health Research & Development*. https://doi.org/10.5958/0976-5506.2018.01058.6

Son, J. B., Ružić, N. K., & Philpott, A. (2023). Artificial intelligence technologies and applications for language learning and teaching. *Journal of China Computer-Assisted Language Learning*. https://doi.org/10.1515/jccall-2023-0015

Son, J., Ružić, N. & Philpott, A. (2025). Artificial intelligence technologies and applications for language learning and teaching. *Journal of China Computer-Assisted Language Learning*, *5*(1), 94-112. https://doi.org/10.1515/jccall-2023-0015

Tashakkori, A., & Teddlie, C. (2010). *SAGE Handbook of Mixed Methods in Social & Behavioral Research* (2nd ed.). SAGE Publications.

Van Le, H., Nguyen, T. a. D., Le, D. H. N., Nguyen, P. U., & Nguyen, T. T. A. (2024). Unveiling critical reading strategies and challenges: a mixed-methods study among English major learners in a Vietnamese higher education institution. *Cogent Education*, *11*(1). https://doi.org/10.1080/2331186x.2024.2326732

Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on learners' academic development. *Education Sciences, 15*(3), 343. https://doi.org/10.3390/educsci15030343

Wei, L. (2023). Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. *Psychol: Educational Psychology.* 14. https://doi.org/10.3389/fpsyg.2023.1261955

Wu, R., & Yu, Z. (2024). Do AI chatbots improve learners learning outcomes? Evidence from a meta-analysis. *British Journal of Educational Technology*, *55*(1), 10-33. https://doi.org/10.1111/bjet.13334

Xinhua, A. (2024). Enhancing Reading Comprehension with AI-Generated Adaptive Texts. *International Journal of New Developments in Education*, *6*(7). https://doi.org/10.25236/ijnde.2024.060708

Yeh, H. C. (2024). The synergy of generative AI and inquiry-based learning: Transforming the landscape of English teaching and learning. *Interactive Learning Environments, 33*(1), 88–102. https://doi.org/10.1080/10494820.2024.2335491

Yin, T. T., & Hanif, H. (2024). Enhancing Malaysian University English Test Reading Skills: Investigating ESL Learners' Performance and Perspectives on MUETBot Intervention. *International Journal of Academic Research in Progressive Education and Development*, *13*(1), 1528-1536. http://dx.doi.org/10.6007/IJARPED/v13-i1/20745

Zhang, J., Zhu, C., & Zhang, Z. (2024). AI-powered language learning: The role of NLP in grammar, spelling, and pronunciation feedback. *Applied and Computational Engineering, 102*, 18–23. https://doi.org/10.54254/2755-2721/102/20240962