

## AI IN ENGLISH LANGUAGE LEARNING: SAUDI LEARNERS' PERSPECTIVES AND USAGE

**Mai Abdullah Alqaed,**

Assistant Professor in Applied Linguistics,  
University of Tabuk, Tabuk, Saudi Arabia.

malqaed@ut.edu.sa

ORCID: 0000-0003-3012-2028

**Abstract.** *Artificial intelligence (AI) is gaining wide attention in second language learning as a beneficial tool. The current research investigates EFL learners' perceptions and usage of AI applications among 68 undergraduate English language major students. The aim is to enhance students' awareness of valuable AI applications and involve them with AI applications to help them correct their English language errors and develop their English usage. The intervention involved guiding participants' engagement with AI applications through specific prompts and analysing their errors into surface and linguistic categories. The objective of this approach is to raise participants' awareness of recurrent errors in their English essays. Also, the study gathers participants' perceptions before and after using the AI applications through pre- and post-questionnaires and focus group interviews. The participants' responses are mainly positive, indicating AI holds the potential to significantly enhance their English language across a variety of skills. The results revealed positive engagement with AI applications, although participants expressed cautious usage due to concerns about overreliance and reliability of the information provided. The study recommends that AI can facilitate language learning through immediate feedback and productive interactions. Further research is needed to guide teachers and L2 learners to use AI while learning English ethically.*

**Keywords:** *Artificial Intelligence; learners' perceptions; learners' awareness; English language learning; ChatGPT*

### 1. INTRODUCTION

Artificial Intelligence (AI) profoundly affects all aspects of our lives, especially language learning and teaching. AI applications are found in smartphones, manufacturing lines, transportation devices, healthcare services and many other fields. AI technologies are rapidly developing beyond our knowledge and tracking. AI is a collaboration between different disciplines; as Bin and Mandal (2019, p.1) noted, "computer science, cybernetics, information theory, neurophysiology, psychology, philosophy, linguistics, and other disciplines." These disciplines interact to form a union of these sciences to help humans.

AI imitates human practices and intelligence through a computer system (Sindermann et al., 2021; Sun et al., 2021). However, AI can only perform what a human can do and thus cannot be superior to humans' understanding of human language (Xiaohong & Yanzheng, 2021; Zhang & Chen, 2021). AI research has focused on creating computer systems that stimulate the human brain and provide an interactional environment with these machines (Sharadgah & Sa'di, 2022). One of the most used AI tools is intelligent chatbots, which have received wide attention in language teaching and learning (Kohnke et al., 2023). Chatbots are computer applications that reproduce human-like conversations through text or voice (Ashfaque et al., 2020). Chatbots are programmed with external knowledge and specific guidelines, as they are not intelligent, they cannot aid humans with the knowledge it is not programmed to perform. Lately, AI has developed chatbot techniques to mimic human language data sets, such as machine learning (ML), deep learning (DL) and natural language processing (Jiang et al., 2022). Chatbots can communicate with users, learn from previous interactions and act as dependable language assistants (Fryer et al., 2020). AI has impacted the educational field, which is the focus of the current paper integrating AI into English language learning.

Recent research noted that AI chatbots facilitate second language acquisition. Kim (2019) investigated learners' English grammar improvement, Gallacher et al. (2018) and Kohnke (2022) explored learners' perception towards using AI applications to learn English. Kohnke et al. (2023) investigated the areas in language learning and teaching that can benefit from AI applications. Several researchers and educators describe the ability to interact with AI and argue for the benefit of AI chatbots in second language learning, however, they do not specify appropriate teacher guidance and illustrate an optimal approach.

Based on researchers' insights on AI applications, some empirical studies have explored the use of (ChatGPT, Minecraft, Curipod, Bard, etc.) in aiding L2 teaching and learning. The results have shown a progressive development in learners' knowledge and skills of the second language (Dai, 2022; Thinh et al., 2020; Yong, 2020). Also, studies have explored learners' perspectives on their usage of AI applications, and mostly their opinions have been positive. However, these studies lack a clear description of the research tools to obtain these results.

Several systematic review articles have advised that more experimental research is needed to maximise the integration of AI in second language learning and teaching (Albadarin et al., 2024; Crompton et al., 2024; Sharadgah & Sa'di, 2022; Son et al., 2023; Vrontis et al., 2022; Zawacki-Richter et al., 2019) to broaden our understanding of how to use AI efficiently and effectively. Sharadgah and Sa'di (2022) noted that most of the research studies in their systematic review focus on learners in higher education due to the fact that their English language proficiency is higher than other students and that the undergraduate learning system is more learner-centred. The current study examines undergraduate English major students' perceptions and usage of AI applications in their

academic essays. The following review of studies sheds light on the areas investigated in the current study, which are AI teacher instruction, learners' engagement with AI in English writing and their perceptions of this usage.

Recent research studies examining AI applications in education conducted from 2019 onwards are mainly a response to the COVID-19 pandemic and have sought to find effective teaching practices with technology (Sharadgah & Sa'di, 2022). Also, Kim et al. (2022) researched teachers' perspectives on AI curriculum design, students' interaction with AI and the learning environment. The results suggested a systematic collaborative learning policy to manage the holistic understanding and implications of AI in language learning. Hence, there is still a need for further empirical studies that show the positive and negative impact of AI in education, especially in the language-learning classroom. Learning English as a second language involves many skills that need to be examined, hence, an array of research targeting AI in this field can aid teachers and educators in sufficient application areas.

AI in second language educational practices can refer to integrating AI applications effectively in language learning. AI applications can specialise in pedagogical implementation and tailor lessons to help teachers adjust their lessons according to learners' needs and abilities. Specific AI applications can generate lesson plans, present activities, design tests, and evaluate student progress. This process aids teachers in developing their teaching methods according to learners' abilities and growth (Gao, 2021; Huang et al., 2021; Wu, 2021). The following sections focus on current research studies that shed light on teacher guidance, L2 learners' usage of AI as well as their attitudes towards this usage.

Teachers can guide learners with specific prompts to facilitate participants' use of AI applications efficiently and ethically. Kohnke et al. (2023) explain how Chinese learners can use ChatGPT to learn English, such as translating, example dialogues, giving example sentences and creating emails and stories. They note some drawbacks of using ChatGPT, such as cheating, inaccurate responses, and cultural bias in the data. They also mention that students should use it by being honest learners and critically aware of their responsibilities as digital citizens. They also focus on teachers' technological proficiency, pedagogical compatibility, and social awareness to guide learners in using AI ethically and effectively. However, their research does not involve EFL learners or participants.

Research studies have shown the positive aspects of AI in English language teaching and learning. Yong (2020) states that AI can be used efficiently in language correction, either semantically or syntactically. Also, AI chatbots can interact orally with language learners and correct their formulation of sentences (Thin et al., 2020). AI is used to translate various kinds of language and has proven its easiness and efficacy (Dai, 2022).

The following studies shed light on using AI in English language writing in relation to the current study context. Alhalangy and AbdAlgane's (2023) study seeks to explore AI as a tool for enhancing teaching strategies and learner autonomy in English courses for EFL speakers in Saudi Arabia. A questionnaire elicited the participants' views, and the results indicate that the responsibility for the effective utilisation of AI in EFL classrooms now lies with both teachers and students. The study concludes that AI has a positive effect on English language teaching and learning, but it requires better integration into educational environments. In another study, Alsadoon (2021) explored Saudi EFL learners' engagement with chatbots to develop their vocabulary knowledge. The chatbot was created using a dictionary, an L1 translation tool, images and a concordancer. The results revealed a development in learners' knowledge of L2 vocabulary retention, indicating that the dictionary is the most significant tool used in the chatterbot.

Ozfidan et al. (2024) explored 189 Saudi undergraduate students' attitudes towards using AI tools such as ChatGPT, Grammarly and Google Translate to enhance English academic writing. The survey results are favourable, noting that AI helps them save time, generate an outline, and provide ideas and feedback. Also, AI aids their language accuracy in spelling, grammar and vocabulary. However, the students have two main concerns with using AI academically, which are ethical and reliability issues. The study recommends clear guidelines and suitable training on properly using AI tools in an academic environment. AbdAlgane and Jabir Othman (2023) investigated the use of an AI application 'Word Tune' to aid EFL learners' writing. This application rewrites, suggests and expands learners' ideas. The results of the questionnaire show that this tool has assisted learners positively through their writing. Al-Sofi (2024) also explored Saudi EFL undergraduate students' usage of ChatGPT to improve their writing skills. The results from a questionnaire and interview reveal that the participants are satisfied with their writing interaction with ChatGPT; however, they mention some concerns, such as plagiarism, academic integrity, overreliance and inaccurate information. To avoid this issue, the researcher suggests teacher supervision, advising students to use ChatGPT as a helping tool and raising their awareness of academic policies.

The use of AI in EFL writing is a favourable tool for learners as it eases the process (AbdAlgane & Jabir Othman, 2023; Al-Sofi, 2024; Lee et al., 2024; Ozfidan et al., 2024). In other EFL learning contexts, learners have similar outcomes in relation to applying AI in English writing. Sumakul et al. (2022) examine 8 EFL undergraduate learners' perceptions of utilising a plot generator tool to write English short stories. The participants have a positive attitude towards using this plot generator while writing; however, the researchers have not supported these views with writing samples. Lee et al.'s (2024) study investigates 80 Korean university students on AI writing tools, like Grammarly and Google Translate, Naver Papago. Five volunteers for the focus group interview were obtained. The results suggest that AI-based writing tools may enhance the writing abilities of English language learners. They also note the advantages of each AI tool regarding

the accessibility of translation and error correction. On the other hand, one of the main disadvantages is the negative impact of overusing AI applications on learners' English writing. Kim et al. (2019) examined 70 Korean college students' development of English grammar skills using either robot chatbots or human chat partners. The intervention lasted 16 weeks with ten chat sessions. Pre- and post-tests showed a significant improvement in both groups' English grammar skills; however, the chatbot group scored better. The results suggest more chatbot empirical investigations. As indicated, AI chatbots can provide learners with formative assessment and immediate feedback, which are essential for language acquisition (Huang et al., 2021).

Most studies exploring teachers', students and stakeholders' viewpoints on utilising AI in the classroom have positive attitudes (Kohnke, 2022; Kohnke et al., 2023; Lee et al., 2024; Wu, 2021). Few studies have explored the issue of EFL learners' perceptions of using AI in the current research context. Alharthi's (2024) study examined 299 EFL Saudi undergraduate students' perceptions regarding the use of ChatGPT. The study employs a quantitative method through questionnaires assessing participants' perceptions of usefulness, efficacy, and the impact of ChatGPT on learning. The statistical results indicate that students have a reasonably favourable attitude towards ChatGPT, perceiving it as a tool that enhances comprehension and communication skills in English language acquisition. The simplicity of use notably influenced students' choices and their intention to continue using ChatGPT. Although participation usage levels differed, numerous participants indicated weekly usage. Moreover, Jamshed et al. (2024) explored the perspectives, attitudes, and challenges faced by Saudi EFL learners in integrating AI into teaching and learning English. Two hundred fifty-eight students were randomly selected from different university programs. The study employed a questionnaire that revealed students generally have a positive opinion and attitude toward AI-powered learning, although many found it challenging.

Previous research studies show a gap in the literature, in which learners need guidelines to interact with AI applications appropriately. Also, most studies surveyed one or two AI applications. The current study aims to address the gaps in the literature by guiding learners with specific prompts and investigating their usage of AI applications in their writings. Furthermore, this study aims to raise students' awareness of various AI tools and elicit their opinions. By means of a mixed-methods approach, this study seeks to dive into their viewpoints to provide a detailed insight into the benefits, challenges and limitations associated with AI applications in English language learning.

## **2. METHODS**

The study utilises a mixed-methods approach with two questionnaires, focus group interviews and analysis of their academic essays. The pre-questionnaire elicits learners' university level, academic score, and knowledge of AI applications. The intervention aims

to raise learners' awareness of recent AI applications and how to use them, such as ChatGPT, Gencraft, Tome, Curipod, and Bard. Also, the learners were given precise instructions and prompts on how to interact with chatbots. The post-questionnaire elicits learners' perceptions about their engagement with AI applications. The focus group interviews served as an in-depth investigation into how the participants used AI applications during the intervention.

Ethical approval was obtained prior to the start of the research to ensure all the research tools, participants, and procedures comply with the ethical standards of the institution. The participants were given information and consent sheets before the start of the study. 68 undergraduate English language learners were recruited from a public university in Saudi Arabia. The participants aged from 21-23, with Arabic as their first language. The participants were in their senior year of obtaining a bachelor's degree in English language. The participants were chosen using a convenience sampling method. The following is an explanation of the research questions and tools.

The current study aims to answer the following research questions:

1. How did the participants utilise AI applications for English language learning?
2. What are the EFL participant's perceptions towards AI applications for English language learning?

**AI usage intervention.** The intervention aims to raise participants' awareness and knowledge of AI applications that can be helpful while learning English as a second language. The three-week intervention sessions were practical training on AI applications such as chatbots like ChatGPT, Gemini and Bard. Other applications that can help them with their assignments and essays are Grammarly, Quillbot, Canvas, Curipod and Tome. The instructor guided the participants in the intervention with some basic prompts, such as asking the chatbot to mark the errors, correct them and comment on the essay. After the sessions, the participants were asked to engage with a chatbot, either ChatGPT, Gemini or Bard. The participants used their previous and current essays to engage with the AI chatbot to help them identify, improve and correct their English errors. Then, the participants examine their errors and classify them into surface structure and linguistic description. The surface structure focuses on the type of error, whether it is omission, addition or misformation of a word or clause. The linguistic description focused on characterising the error into morphological, grammatical, orthographic, semantic or pragmatic. The categorisation of their errors aimed to raise their awareness of common errors so they could develop their L2 knowledge in that specific linguistic area. Also, this engagement aimed to use AI applications efficiently and ethically. The participants engaged for three weeks with chatbots to enhance their English language essays through AI. As shown in Table 1, the intervention followed an 8-week plan:

**Table 1.** Outline of the intervention

Research Stage/week	Allocated Time	Experimental Group
<b>Pre-questionnaire</b> <b>Week 1</b> <b>02/06/2024</b>	90 minutes	To assess the participants' awareness of AI applications.
<b>Treatment</b> <b>Weeks 2 to 4</b> <b>09-30/06/2024</b>	Four 60-minute sessions (two per week)	Focusing participants' attention on AI applications through explicit engagement with their previous essays.
<b>Treatment</b> <b>Weeks 5 and 6</b> <b>01-14/07/2024</b>	Self- engagement	The participants will engage with their essays to correct their errors using AI to reinforce the intervention.
<b>Week 7</b> <b>14-21/07/2024</b>	Self- engagement	The instructor assesses the participants' awareness of AI applications.
<b>Questionnaire and Interviews</b> <b>Week 7&amp;8</b> <b>14-31/07/2024</b>	90 minutes for the questionnaire 60 minutes for each focus group interview (6 groups)	To elicit the participants' perceptions of the AI intervention.

**Questionnaires.** Before starting the intervention, a pre-questionnaire is handed to the participants to elicit their overall knowledge of AI artificial intelligence applications. There are four open-ended questions to identify the participants' knowledge, use, motive and the different kinds of AI applications they interact with before the study. The post-questionnaire is handed out to the participants after the intervention. It is designed using a 5-point Likert scale questionnaire (1 strongly agree to 5 strongly disagree). There are 15 items regarding the participants' general perceptions towards their AI application usage, knowledge and experience. At the end of the questionnaire, there is an open-ended question stating the main AI applications that the students interacted with to encourage participant explanation (Dörnyei, 2007). Content validity is applied to ensure the validity of the questionnaire items by examining the items by applied linguistics experts (Creswell, 2014). The validity is ensured by commenting that the questionnaire items target the constructs being measured in the current study.

**Focus-group interviews.** The current research opted for focus-group interviews due to the participant's ability to engage in deep and insightful discussions, which can enrich the study significantly. Focus-group interviews mainly involve a group of participants between 6 and 12 members. The interviewer records the responses of the participants while they interchangeably reply to the interview questions (Dörnyei & Griffee, 2010). The participants were invited to an online focus group interview. Three groups were obtained, and around 5-6 participants were in each group. The structure of the interview questions is semi-structured, investigating the participants' engagement with AI applications during the intervention. There are six questions; the first is an icebreaker, whereas the others tap into how they use AI applications. Also, the interview questions

illustrate the learners' perceptions towards using AI applications. The following are the interview questions:

Please tell me about yourself: 1) How long have you been learning English? Do you enjoy it? 2) What applications do you use? Why do you use them? 3) Does it help you improve your English language? How ?, 4) Will you continue using AI applications? What are they? 5) Do you feel relaxed when using AI applications? 6) Do you feel confident when using AI applications? The negative and positive side of using AI was also mentioned.

The focus group recordings are first transcribed to enable a detailed examination of the participants' responses. Then, the researcher codes the transcription to identify the main themes, such as which AI applications they use and the advantages and disadvantages of this usage. A thematic analysis approach is applied to highlight the recurring themes in the participants' perceptions. Also, a content analysis emphasises the occurrence of specific words, such as ChatGPT and responses (e.g., yes or no). These methods assist the researcher in gaining meaningful insights into the focus group interviews (Creswell, 2014), which are presented in the following section.

### 3. RESULTS

After a 3-week intervention, learners self-engaged with AI applications for 3 weeks. They enter their English essays and write a specific prompt (e.g., mark the errors, correct them, and give me feedback on how to develop my essay), and then they engage in the differences that the chatbot highlights and corrects. The participants retrieved the interactions from the chatbot and handed in their work after spending some time evaluating their writings and observing how it improved. The following is an example of several interactions and examples between participants and chatbots. Pseudonymous names are used to protect the privacy of the participants.

Participant "Sarah" commented that most of her essay errors after engaging with ChatGPT are morphological, as seen in Table 2 below. The engagement with AI has raised the participant's awareness of her errors as well as providing her with feedback to overcome this inaccuracy in her usage, as shown in the following Table 2:

**Table 2 .** An example of "Sarah's writing errors"

No.	Error Item	Surface Structure Description	Linguistic Description	Correction
1.	*infortunately	Misformation	Morphological	unfortunately
2.	*inable	Misformation	Morphological	unable
3.	*unsignficant	Misformation	Morphological	insignificant
4.	*aquisicion	Misformation	Orthographic	acquisition
5.	we can see *also	Misordering	Syntactic	we can also see

Another student "Nora" noted that most of her errors are grammatical. Interacting with AI has helped Nora become aware of her verbal usage. She comments that



throughout her essay, she uses several verb tenses, and ChatGPT has helped her notice this error and maintain the consistency of one tense throughout her writing. The following Table 3 is an example of some of her errors:

**Table 3.** An example of “Nora’s writing errors”

No.	Error Item	Surface Structure Description	Linguistic Description	Correction
1.	*and I be an English teacher	Misformation	Grammatical	To become an English teacher
2.	*My future should be perfect as I expected to be	Misordering	Syntactic	My future should be as perfect as I expected it to be
3.	*I must do very well in the college	Misformation	Grammatical and Semantic	I must excel in college

Participant “Manal” noted that most of her errors are syntactic. She struggles with the word ordering of a sentence, and ChatGPT assists her in noticing the connection between English phrases and clauses. The following Table 4 is an example of her writing errors:

**Table 4.** An example of “Manal’s writing errors”

No.	Error Item	Surface Structure Description	Linguistic Description	Correction
1.	*saying they that	Misordering	Syntactic	Saying that they
2.	*I have many struggles across	Misordering	Syntactic	I have across many struggles
3.	*I do at night my homework	Misordering	Syntactic	I do my homework at night or At night, I do my homework
4.	*I do quickly my exercise	Misordering	Syntactic	I do my exercise quickly
5.	*She so	Misordering	Syntactic	So she

“Fatimah”, on the other hand, expresses her weakness in lexical selection and that ChatGPT has helped develop her vocabulary knowledge. Table 5 illustrates Fatimah’s writing errors with ChatGPT corrections:

**Table 5.** An example of “Fatimah’s writing errors”

No.	Error Item	Surface Structure Description	Linguistic Description	Correction
1.	*Boys between ages 6-12 came	Misformation	Lexical selection	Boys between 6-12 emerges
2.	*Choose a boss	Misordering	Lexical selection	Choose a leader
3.	*They found a boar	Misformation	Lexical selection	They encountered a boar

There was a clear distinction between participants' errors; half of the participants had a variety of errors, and others had specific linguistic errors, whether morphological, grammatical, lexical, etc. The feedback from ChatGPT has aided learners in internalizing accurate English language patterns and providing them with rapid and stress-free exposure. Most students have a positive view of their essay interaction with ChatGPT. They expressed that AI can act as a personal teacher, assessing and providing feedback within a relaxed environment.

**Participants' Perceptions.** The first questionnaire explores general information about the participants' usage of AI applications before the intervention. Most of the participants 85% are seniors specialising in English language, 52% of whom have a GPA score higher than 4/5. The participants were interviewed about their usage of AI applications, and 60% replied that they do not use it, whereas 10% mentioned they do not know, and 30% positively answered that they use AI applications. The final question tapped into the participants' willingness to learn how to use AI applications, and 90% of the participants had a positive response.

The second questionnaire explores learners' perceptions toward the use of AI applications while learning English as a second language. The reliability of the questionnaires is ensured through a Cronbach's alpha test and the results of 0.931 show that the items have high internal consistency. The following table illustrates the results of the participants' general perceptions toward the use of AI:

**Table 6.** Results of participants' general perceptions toward the use of AI

Item	Mean	SD
It is important to know how to use AI applications.	3.83	1.58
Using AI applications can motivate me to learn English.	3.11	1.46
Using AI applications can improve my English pronunciation.	3.94	1.06
Using AI applications can help me learn new English words.	4.17	0.78
Using AI applications can help me learn new English words.	4.06	0.93
Using AI applications can develop my English listening skills.	4.39	0.70
Because of the class activities, I am more aware of AI applications now than I was before.	3.67	1.22
Because of the class activities, AI applications have made my English language learning less stressful.	3.77	0.95
I think AI applications are a good language learning tool.	4.06	0.91
I will continue to use AI applications as a language learning tool.	4.39	0.73
AI applications have helped me improve my written assignments.	4.22	0.83
AI applications have helped me improve my PowerPoint presentation projects.	4.06	0.93
I never paid attention to AI applications before the intervention.	4.00	0.87
It is interesting to interact with AI applications.	4.22	0.83
It is useful to interact with AI applications.	4.22	0.83
<b>Overall</b>	<b>3.97</b>	<b>1.18</b>

As shown in Table 6, the results show an overall agreement between the participants' perceptions of their usage of AI applications. Generally, the means across most questions suggest that respondents tend to agree with the statements. The mean

values range from about 3.11 to 4.39 across questions, indicating varying levels of agreement. Items like *Using AI applications can develop my English listening skills*, and *I will continue to use AI applications as a language learning tool* received higher mean scores (around 4.39), showing strong agreement among participants. In contrast, *Using AI applications can motivate me to learn English*, which had a lower mean score (around 3.11), indicating a less favourable perception.

The standard deviations are relatively low, suggesting most responses are clustered around the mean. For instance, Question 6 and Question 10 have lower variability (SD = 0.70, 0.73), indicating consistent agreement among participants. Conversely, item 2 shows a higher standard deviation (SD = 1.46), indicating greater variability in responses for that question. This suggests that while some participants strongly agree, others are indifferent or disagree.

The consistently high mean values in many questions imply a generally positive perception of AI applications in learning English. Participants seem to feel that these applications enhance various aspects of language learning, including vocabulary, reading, and listening skills. The questions with lower means and higher standard deviations warrant further investigation. This possibility of divided opinions suggests that while some respondents may find AI applications beneficial, others may not view them as significantly impactful, indicating potential engagement barriers or scepticism regarding the effectiveness of these tools. Overall, the results shed light on the efficacy of AI applications in language learning contexts and highlight areas for further support that might be needed.

At the end of the questionnaire, there is an open-ended question eliciting the participants' common AI applications they use; 82.87% ChatGPT, 11.42% commented that they use Grammarly and Quillbot, and other applications such as Reverso, Curipod, Gamma, Gemini, and POE received 5.71%.

**Focus-group interviews.** The analysis of the three focus group interviews is summarised in table format for clarity. Each table represents the responses for each group, with key themes identified based on the discussions. Four main themes arose from the participants' perspectives: the use of specific applications, effects on English learning, further usage of AI applications, and their comfort and confidence levels.

Across all groups, popular AI applications like ChatGPT, Bard, POE, Canva, Quillbot, and Gamma. Several participants highlighted the high subscription costs as a concern. They note that the purpose of their AI use is in assignments, grammar correction, and accessible information retrieval. The first group mentions that AI is helpful in doing quick homework or assignments. The other two groups elaborated by mentioning translating, asking specific questions, retrieving information, and correcting their grammar. However, there is a mixed perception of how much these applications can help improve their English learning skills. While most students find them useful for vocabulary

acquisition and writing structure, one student group are sceptical that they do not contribute significantly to actual language learning.

Most participants indicate a willingness to continue using AI tools but with a noted caution about depending on these “robots”. Only 1 participant negatively replied, and another mentioned occasionally she will use AI applications. Comfort levels varied; 3 participants expressed uneasiness about their privacy, potential errors, laziness and loss of skills, whereas the others felt comfortable using the chatbots. Additionally, feelings of confidence are also quite variable; 6 participants expressed fear of plagiarism and loss of originality in their work, while others noted a lack of confidence in their writing abilities as AI assistance became more accessible.

The focus group interviews reveal noteworthy views regarding the use of AI applications for learning English. Participants appreciate the efficiency these tools offer but are aware of their limitations and potential negative impacts on learning and creativity. This suggests a need for a balanced approach to using AI tools, highlighting their strengths while encouraging independent utilisation and awareness of the drawbacks.

#### **4. DISCUSSION**

The current study aims to seek undergraduate English major students' usage and perceptions of using AI applications specifically in their essay writing. The following focuses on explaining the first research question concerning participants' usage of AI applications with previous research. The intervention sessions aim to raise the participants' awareness of helpful AI applications such as ChatGPT, Gemini, Bard, Grammarly, Quillbot, Canva, Curipod, and Tome. The instructor guided the participants in the intervention sessions with some basic prompts on how to ask the chatbot to mark the errors, correct them, translate, suggest new vocabulary and comment on the essay. The participants sufficiently engaged with the AI application and analysed their errors according to various linguistic features. This engagement has positively enhanced their knowledge of their recurrent errors. It has also raised their awareness of the type of surface structure they frequently make, whether it is omission, addition or malformation of a word or clause. Furthermore, their engagements have highlighted which linguistic area they need to develop, whether it is morphological, grammatical, orthographic, semantic or pragmatic.

The current research results align with previous studies examining EFL learners' interaction with AI applications. The participants used ChatGPT to correctly retrieve the meaning and part of a word's speech in context, as well as explain language mistakes. This learning tool has proved to work effectively with L2 learners, interacting orally (Luo & Cheng, 2020; Thinh et al., 2020), correcting learners' errors (Kohnke et al., 2023; Ozfidan et al., 2024; Thinh et al., 2020; Yong, 2020) and translating to their L1 (Alsadoon, 2021; Dai, 2022).

Also, AI applications encourage L2 learners' autonomy in that learners specifically can engage with a chatbot in areas they lack (Alhalangy & AbdAlgane, 2023). ChatGPT, Quillbot, Bard and many other applications can present EFL learners with suggestions for more advanced vocabulary and, hence, develop their vocabulary knowledge (Alsadoon, 2021). The participants expressed that AI could act as a personal teacher, assessing and providing feedback within a relaxed environment. AI chatbots act as personal tutors, giving immediate and informative feedback in a comfortable learning environment as seen in (Huang et al., 2021; Ozfidan et al., 2024).

The current research aimed to raise learners' attention to their recurrent linguistic errors by engaging with a chatbot. The results reveal that the participants pinpointed their errors to various linguistic features such as morphological, lexical, and syntactic, making them aware of their weaknesses and trying to overcome these errors in future interactions, which aligns with Kim et al. (2019) study reporting significant development in their participants' English grammar skills using chatbots.

Guiding learners with specific prompts has aided the participants in using AI applications efficiently. Kohnke et al. (2023) recommended specific ChatGPT prompts to learn English, such as translating, example dialogues, giving example sentences and creating emails and stories. These prompts can aid users in using AI with ease of not violating any academic integrity or committing plagiarism. The current research aimed at guiding learners to feel comfortable using AI.

The second aim seeks to elicit participants' perceptions while using AI applications for English language learning and evaluating their essay writings as positive. They mention several advantages, such as quick retrieval of knowledge and feedback on grammatical and lexical errors. The participants positively perceive that AI can improve their English language learning in several skills. Most studies exploring students' perceptions of utilising AI in the classroom also have a positive attitude (Alharthi, 2024; Kohnke, 2022; Kohnke et al., 2023; Lee et al., 2024; Ozfidan et al., 2024; Wu, 2021).

On the other hand, several disadvantages are mentioned regarding AI applications. In the focus-group interviews, participants mentioned the fear of plagiarism, overreliance, high subscription costs and ethical issues. Also, this issue received the lowest level of agreement in the questionnaire that AI can motivate learners due to the fear of heavily relying on AI. The participants noted some drawbacks of using ChatGPT, such as cheating, inaccurate responses, and overreliance. Several studies explored similar attitudes and challenges faced by Saudi EFL learners in integrating AI into learning English; the students generally have a positive attitude toward AI-powered learning, although many found it challenging (AbdAlgane & Jabir Othman, 2023; Alhalangy & AbdAlgane, 2023; Jamshed et al., 2024; Ozfidan et al., 2024) which correlates with the current study.

In conclusion, the study's findings contribute to the growing interest in AI in language learning and education, shedding light on the Saudi context. The advantages of these applications, such as ease of use, immediate feedback, and the development of language skills, have been acknowledged. Several implications emerge, such as ethical issues, reliability, and overreliance, remain critical issues to be researched. These implications emphasise the need for an optimal approach to using AI in English language learning to foster a holistic second language learning environment, joining the benefits of technology as well as maintaining critical thinking and ethical issues.

## **5. CONCLUSIONS**

The current research adds to the growing knowledge of integrating AI in EFL contexts, especially in Saudi Arabia. The results show an improvement in undergraduate Saudi learners' awareness of AI tools that can aid them in English language learning. Moreover, their views on this engagement were of valuable insight. The use of AI tools has shown positive results in learners' awareness of their second language weaknesses and errors in various language features. Also, guided instructions have aided learners in engaging with AI tools effectively. However, they were anxious to rely on these applications excessively and wanted to learn how to use AI ethically. Despite the promising results of integrating AI applications in language learning, there are several limitations and considerations that merit attention. AI applications are here to stay, so it can be helpful to provide a balanced approach to effectively use AI applications in language learning to ensure all participants feel competent and comfortable using these tools. Instructors should provide guidance on how to effectively incorporate AI within educational frameworks without compromising students' critical thinking and writing skills.

Further research can focus on training educational stakeholders, especially students and teachers, on how to integrate AI contentedly and ethically. Teachers should encourage students to view AI as a supplementary resource rather than a replacement for their efforts, stressing the importance of personal input in academic work. Training students on utilising these AI applications effectively may enhance their learning experience without fostering dependence. Organising discussions surrounding the ethics of using AI in academic settings, particularly about plagiarism and the integrity of personal work. Also, carrying out further investigations on L2 learners' attitudes towards using AI in different educational contexts can broaden our understanding to establish an optimal approach for incorporating AI in English language learning. These recommendations can help in forming strategic approaches towards integrating AI into English language learning effectively, ensuring both technological advancement and academic integrity.

## REFERENCES

- AbdAlgane, M., & Jabir Othman, K. A. Utilising artificial intelligence technologies in Saudi EFL tertiary level classrooms. *Journal of Intercultural Communication*, 23(1), 92-99. Available at SSRN: <https://ssrn.com/abstract=4565768>
- Al-Sofi, B. B. M. A. (2024). Artificial intelligence-powered tools and academic writing: to use or not to use ChatGPT. *Saudi Journal of Language Studies*, 4(3), 145-161. <https://doi.org/10.1108/SJLS-06-2024-0029>
- Albadarin, Y., Saqr, M., Pope, N., & Tukiainen, M. (2024). A systematic literature review of empirical research on ChatGPT in education. *Discover Education*, 3(1), 60. <https://doi.org/10.1007/s44217-024-00138-2>
- Alhalangy, A., & AbdAlgane, M. (2023). Exploring the impact of AI on the EFL context: A case study of Saudi universities. *Journal of Intercultural Communication*, 23(2), 41-49. [doi.org/10.36923/jicc.v23i2.125](https://doi.org/10.36923/jicc.v23i2.125)
- Alharthi, S. M. (2024). Beyond Traditional Language Learning: EFL Student Views on ChatGPT in Saudi Arabia. *Arab World English Journal (AWEJ) Special Issue on CALL*, 10, 15-35. <https://dx.doi.org/10.24093/awej/call10.2>
- Alsadoon, R. (2021). Chatting with AI Bot: Vocabulary learning assistant for Saudi EFL learners. *English language Teaching*, 14(6), 135-157. <https://doi.org/10.5539/elt.v14n6p135>
- Ashfaque, M. W., Tharewal, S., Iqbal, S., & Kayte, C. N. (2020). A Review on Techniques, Characteristics and approaches of an intelligent tutoring Chatbot system. In *2020 International Conference on Smart Innovations in Design, Environment, Management, Planning and Computing (ICSIDEMPC)*, (pp. 258-262). IEEE, Aurangabad, India. DOI: [10.1109/ICSIDEMPC49020.2020.9299583](https://doi.org/10.1109/ICSIDEMPC49020.2020.9299583).
- Bin, Y., & Mandal, D. (2019). English teaching practice based on artificial intelligence technology. *Journal of Intelligent & Fuzzy Systems*, 37(3), 3381-3391. DOI: 10.3233/JIFS-179141
- Creswell, J. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- 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. <https://doi.org/10.1111/bjet.13460>
- Dai, H. (2022). Comparative analysis of machine translation and human translation under the background of internet. In: J. Jansen, B., Liang, H., Ye, J. (eds) *International Conference on Cognitive based Information Processing and Applications (CIPA 2021). Lecture Notes on Data Engineering and Communications Technologies*, vol 84. Springer, Singapore. [https://doi.org/10.1007/978-981-16-5857-0\\_111](https://doi.org/10.1007/978-981-16-5857-0_111)
- Dörnyei, Z. (2007). *Research methods in applied linguistics: quantitative, qualitative, and mixed methodologies*. Oxford, UK. Oxford University Press.
- Dörnyei, Z., & Griffee, D. (2010). Research Methods in Applied Linguistics. *TESOL Journal*, 1(1), 181-183. <https://doi.org/10.5054/tj.2010.215611>
- Fryer, L., Coniam, D., Carpenter, R., & Läpuşeanu, D. (2020). Bots for language learning now: Current and future directions. *Language Learning & Technology*, 24(2), 8-22. Retrieved from <http://hdl.handle.net/10125/44719>
- Gallacher, A., Thompson, A., Howarth, M., Taalas, P., Jalkanen, J., Bradley, L., & Thouësny, S. (2018). "My robot is an idiot!"—Students' perceptions of AI in the L2 classroom. *Future-proof CALL: language learning as exploration and encounters—short papers from EUROCALL*, 70-76. <https://doi.org/10.14705/rpnet.2018.26.815>
- Gao, H. (2021). Reform of college English teaching model under the background of artificial intelligence. *Journal of Physics: Conference Series*. Retrieved from <https://iopscience.iop.org/article/10.1088/1742-6596/1744/4/042161/meta>

- Alqaed, M. (2024). AI in English Language Learning: Saudi Learners' Perspectives and Usage. *Advanced Education*, 25. DOI: 10.20535/2410-8286.318972
- Huang, J., Saleh, S., & Liu, Y. (2021). A review on artificial intelligence in education. *Academic Journal of Interdisciplinary Studies*, 10(3). <https://doi.org/10.36941/ajis-2021-0077>
- Jamshed, M., Alam, I., Al Sultan, S., & Banu, S. (2024). Using artificial intelligence for English language learning: Saudi EFL learners' opinions, attitudes and challenges. *Journal of Education and e-Learning Research*, 11(1), 135-141. <https://doi.org/10.20448/jeelr.v11i1.5397>
- Jiang, H., Cheng, Y., Yang, J., & Gao, S. (2022). AI-powered chatbot communication with customers: dialogic interactions, satisfaction, engagement, and customer behaviour. *Computers in Human Behavior*, 134. <https://doi.org/10.1016/j.chb.2022.107329>
- Kim, H., Shin, D. K., Yang, H., & Lee, J. H. (2019). A study of AI chatbot as an assistant tool for school English curriculum. *Journal of Learner-Centered Curriculum and Instruction*, 19(1), 89-110. DOI: [10.22251/jlcci.2019.19.1.89](https://doi.org/10.22251/jlcci.2019.19.1.89)
- Kim, J., Lee, H., & Cho, Y. H. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. *Education and Information Technologies*, 27(5), 6069-6104. <https://doi.org/10.1007/s10639-021-10831-6>
- Kim, N. Y. (2019). A study on the use of artificial intelligence chatbots for improving English grammar skills. *Journal of Digital Convergence*, 17(8), 37-46. <https://doi.org/10.14400/JDC.2019.17.8.037>
- Kohnke, L. (2022). A qualitative exploration of student perspectives of chatbot use during emergency remote teaching. *International Journal of Mobile Learning and Organisation*, 16(4), 475-488. <https://doi.org/10.1504/IJMLO.2022.125966>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 54(2), 537-550. <https://doi.org/10.1177/00336882231162868>
- Lee, Y. J., Davis, R. O., & Lee, S. O. (2024). University students' perceptions of artificial intelligence based tools for English writing courses. *Online Journal of Communication and Media Technologies*, 14(1). <https://doi.org/10.30935/ojcm/14195>
- Luo, M., & Cheng, L. (2020). Exploration of interactive foreign language teaching mode based on artificial intelligence, 2020 *International Conference on Computer Vision, Image and Deep Learning (CVIDL)*. <https://doi.org/10.1109/CVIDL51233.2020.00-84>
- Ozfidan, B., El-Dakhs, D. A. S., & Alsalam, L. A. (2024). The use of AI tools in English academic writing by Saudi undergraduates. *Contemporary Educational Technology*, 16(4). <https://doi.org/10.30935/cedtech/15013>
- Sharadgah, T. A., & Sa'di, R. A. (2022). A Systematic Review of Research on the Use of Artificial Intelligence in English Language Teaching and Learning (2015-2021): What are the Current Effects? *Journal of Information Technology Education: Research*, 21. <https://doi.org/10.28945/4999>
- Sindermann, C., Sha, P., Zhou, M., Wernicke, J., Schmitt, H. S., Li, M., Sariyska, R., Stavrou, M., Becker, B., & Montag, C. (2021). Assessing the attitude towards artificial intelligence: Introduction of a short measure in German, Chinese, and English language. *KI-Künstliche Intelligenz*, 35, 109-118. <https://doi.org/10.1007/s13218-020-00689-0>
- Son, J., Ružić, N., & 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>
- Sumakul, D. T. Y., Hamied, F. A., & Sukyadi, D. (2022). Students' perceptions of the use of AI in a writing class, 67th *TEFLIN International Virtual Conference & the 9th ICOELT 2021 (TEFLIN ICOELT 2021)*. <https://doi.org/10.2991/assehr.k.220201.009>
- Sun, Z., Anbarasan, M., & Praveen Kumar, D. J. C. I. (2021). Design of online intelligent English teaching platform based on artificial intelligence techniques. *Computational Intelligence*, 37(3), 1166-1180. <https://doi.org/10.1111/coin.12351>
- Thin, N. T., Hai, N. D. X., & Tho, T. P. (2020). The influential role of robot in second language classes based on artificial intelligence. *International Journal of Mechanical Engineering and Robotics Research*, 9(9), 1306-1311. <https://doi.org/10.108178/ijmerr.9.9.1306-1311>



- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, 33(6), 1237-1266. <https://doi.org/10.1080/09585192.2020.1871398>
- Wu, X. (2021). Application of artificial intelligence in higher vocational English teaching mode. *Journal of Physics: Conference Series*. DOI: 10.1088/1742-6596/1852/2/022089
- Xiaohong, W., & Yanzheng, W. (2021). The application of artificial intelligence in modern foreign language learning, *4th International Conference on Big Data and Education*. 34-37. <https://doi.org/10.1145/3451400.3451406>
- Yong, Q. (2020). Application of artificial intelligence to higher vocational English Teaching in the Information Environment. *Journal of Physics: Conference Series*. <https://doi.org/10.1088/1742-6596/1533/3/032030>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 1-27. <https://doi.org/10.1186/s41239-019-0171-0>
- Zhang, X., & Chen, L. (2021). College English smart classroom teaching model based on artificial intelligence technology in mobile information systems. *Mobile Information Systems, 2021*, 1-12. <https://doi.org/10.1155/2021/5644604>

Received: November 29, 2024  
Accepted: December 27, 2024

### **Funding**

Not Applicable

### **Conflict of interest**

There is no conflict given in the current research.

## **ШТУЧНИЙ ІНТЕЛЕКТ У ВИВЧЕННІ АНГЛІЙСЬКОЇ МОВИ: ПОГЛЯДИ ТА ДОСВІД СТУДЕНТІВ ІЗ САУДІВСЬКОЇ АРАВІЇ**

**Анотація.** Штучний інтелект (ШІ) привертає дедалі більше уваги як корисний інструмент у вивченні другої мови. Це дослідження аналізує досвід 68 студентів бакалаврату, які вивчають англійську мову як іноземну (EFL), у використанні програм ШІ. Метою роботи є підвищення обізнаності студентів щодо ефективних застосунків ШІ та залучення їх до роботи з ними для виправлення помилок у комунікації англійською мовою та вдосконалення мовленнєвих навичок. Експеримент передбачав взаємодію учасників із програмами ШІ через конкретні запити та аналіз їхніх помилок за лінгвістичними категоріями. Це дозволило підвищити обізнаність студентів щодо повторюваних помилок у їхніх письмових роботах. У рамках дослідження також було зібрано дані про сприйняття учасників до та після використання застосунків ШІ шляхом проведення анкетування та інтерв'ю у фокус-групах. Результати показали здебільшого позитивне сприйняття студентами використання ШІ, що підтверджує його значний потенціал для покращення володіння англійською мовою. Студенти зазначили, що ШІ сприяє продуктивній взаємодії та надає миттєвий зворотний зв'язок. Водночас були висловлені певні побоювання щодо надмірної залежності від ШІ та надійності отриманої інформації. У дослідженні рекомендовано використовувати ШІ як інструмент підтримки у вивченні англійської мови завдяки його здатності забезпечувати оперативний зворотний зв'язок та стимулювати активну участь студентів. Однак наголошується на необхідності подальших досліджень для розробки рекомендацій щодо етичного використання ШІ викладачами та студентами.

**Ключові слова:** штучний інтелект; сприйняття студентів; обізнаність студентів; вивчення англійської мови; ChatGPT.