BILINGUAL PUBLISHING GROUP

Forum for Linguistic Studies
https://journals.bilpubgroup.com/index.php/fls

ARTICLE

Exploring Teachers' Perceptions in Using AI for EFL Learners' Vocabulary Teaching

Saleh Amelh Alrasheedi

English Department, College of Education, Majmaah University, AL-Majma'ah 11952, Saudi Arabia

ABSTRACT

Integration of artificial intelligence (AI) into the teaching process has become dominant. It is important to understand how teachers perceive the technology for teaching. This study aims to fill a significant gap in previous studies by examining the factors that influence the willingness of English teachers in Saudi Arabia to use AI tools for vocabulary teaching. It is unexplored enough in education. This study uses the technology acceptance model (TAM), which focuses on the relationship between perceived usefulness, ease of use, and teachers' willingness to use AI. Data were collected from 60 teachers via questionnaire. Then SPSS was used for data analysis. The results showed that perceived usefulness ($\beta = 0.52$, $p < 0.001$) and ease of use ($\beta = 0.31$, $p < 0.01$) were two significant predictors of teachers' intention to use AI in vocabulary teaching. This denoted approximately 47% of the variance between the two factors. However, certain challenges have emerged. They include insufficient training, insufficient support for Arabic, and insufficient funding from educational institutions. In conclusion, although teachers are enthusiastic about AI. Teachers' success depends on receiving regular fruitful training, developing the different AI tools in such a way as to meet Saudi culture and language, and getting more support from educational institutions. This study makes a significant contribution to the field of education by validating the applicability of the technology acceptance model (TAM) in teaching English vocabulary in Saudi Arabia and providing practical recommendations for educationist and policymakers.

Keywords: AI; TAM; Vocabulary; Linguistic; Culture; SPSS

*CORRESPONDING AUTHOR:
Saleh Amelh Alrasheedi, English Department, College of Education, Majmaah University, AL-Majma'ah 11952, Saudi Arabia; Email: s.alresheed@mu.edu.sa

ARTICLE INFO
Received: 17 October 2025 | Revised: 17 November 2025 | Accepted: 18 November 2025 | Published Online: 20 November 2025
DOI: https://doi.org/10.30564/fls.v7i12.12490

CITATION
Alrasheedi, S.A., 2025. Exploring Teachers' Perceptions in Using AI for EFL Learners' Vocabulary Teaching. Forum for Linguistic Studies. 7(12): 1428–1446. DOI: https://doi.org/10.30564/fls.v7i12.12490

1. Introduction

Artificial Intelligence (AI) is fast emerging as a catalyst in transforming educational landscapes worldwide [1,2], fundamentally reshaping the ways in which knowledge is delivered, acquired, and assessed. AI technologies have introduced a paradigm shift in the education sector by enabling personalized, adaptive learning experiences [3] that were difficult to attain through conventional pedagogies. In recent years, Saudi Arabia has witnessed significant digitalization of education, spurred by national initiatives such as Vision 2030 and an increasing recognition of the need to cultivate 21st-century skills among learners [4]. As part of this transformative agenda, the integration of AI-powered tools has begun to play a pivotal role in English language teaching across all skills.

The inclusion of such AI applications allows for innovative approaches for both learners and educators [5]. Tools like Duolingo and Quizlet utilize gamification and adaptive algorithms to facilitate individualized vocabulary practice, while platforms such as Grammarly and ChatGPT provide real-time feedback and language modeling to support writing development and usage accuracy [6]. With such features, these technologies have the potential to increase student motivation, foster language autonomy, and create equitable learning opportunities for vocabulary acquisition, in diverse and large classrooms that characterize many Saudi public schools [7].

There are three major areas of technology in language education and teaching. First, it uses the Technology Acceptance Model (TAM) and applies it to the use of artificial intelligence (AI) in teaching vocabulary to native English speakers. This opens up new possibilities and a better understanding of the reasons why teachers accept or reject new technologies, especially in previously unfamiliar contexts [8]. Second, the study is methodologically rigorous. Each step is clearly explained to facilitate replication by other researchers. It uses a robust quantitative research design, validated measurement instruments, carefully selected samples, and rigorous statistical analysis. SPSS version 27 was used to analyze the data, to determine the robustness of the results. Other researchers can easily adopt this method and learn how to develop or validate their findings. Thirdly, the study focuses on practical applications in the classroom. It goes beyond theoretical discussions, delving deeply into the thoughts of Saudi Arabian EFL teachers about the use of AI and the practical challenges they face. This is not just rhetoric; it provides useful insights that can be directly applied by curriculum developers, methodologists, and policymakers. This helps them develop critical thinking strategies to enable AI to completely transform language teaching, not only in literature but also in everyday life.

However, the successful integration of AI into classroom practice does not depend solely on technological availability, but also and crucially, on teachers' perceptions, expertise, and readiness to embrace such digital innovations [9]. Despite the promise of AI in facilitating vocabulary growth, teachers who are newly introduced to technological aids such as in Saudi Arabia, may face practical and pedagogical challenges—including insufficient training, limited access to resources, and the need to align AI usage with local curricular and cultural expectations.

Interest in the use of artificial intelligence (AI) in language teaching, particularly vocabulary learning, is growing. However, a review of previous studies revealed a lack of studies that use frameworks such as the Technology Acceptance Model (TAM) to assess the use of AI by teachers and students for this purpose. Furthermore, there is insufficient data to establish clear relationships between factors such as effectiveness, perceived usefulness, and teachers' willingness to use AI, especially among ESL students in Saudi Arabia.

Therefore, this study aims to achieve three main objectives. First, it examines how ESL teachers in Saudi Arabia's perceptions of the use of artificial intelligence (AI) influence their willingness to use AI in vocabulary teaching. Second, it examines the extent to which teachers perceive the usefulness of AI and how this perception influences their willingness to experiment with AI. Finally, it examines how the ease of use of AI influences teachers' perceptions of its usefulness in classroom teaching.

In the background of these possibilities, the present study aims to address the following research questions:

1. What are teachers' perceptions of the effectiveness of AI applications in teaching English vocabulary to EFL learners?
2. What challenges do English teachers face when us-

ing AI tools in Saudi schools?

3. What linguistic, cultural, and institutional barriers affect the implementation of AI in the Saudi educational context?
4. How can policymakers and school leaders be informed about the professional development and support needs for successful AI adoption?

Regarding the theoretical Framework of the study, Technology Acceptance Model (TAM) was involved. This study is based on TAM, which focuses on people's perceptions of why they adopt new technologies [10]. Briefly, TAM focuses on two main dimensions: perceived usefulness (PU) and ease of use (PEOU). These two factors reflect how people perceive a system, and how these feelings motivate them to try it. In this study, teachers' perceived usefulness is their belief that artificial intelligence can enhance the teaching of new vocabulary. In terms of ease of use, the answer is simple: teachers do not find it difficult to use artificial intelligence.

Perceived usefulness is an important motivation for adopting new technologies, especially in education. For example, teachers are more likely to use tools that help students learn better, save time, or make courses more engaging [11]. In teaching English as a Second Language (ESL), if teachers believe that AI can deliver interactive activities or personalized instruction to each student, they will readily embrace the concept [12,13]. Therefore, the study hypothesizes:

H1: *If teachers believe that AI is useful for teaching vocabulary, they are likely to be willing to try it.*

As perceived usability and willingness to use AI are concerned, ease of use is very important for any tool. If teachers perceive an AI tool as difficult or too challenging for learning, they may avoid using it, despite the usefulness of the tool [11]. Technical difficulties and complex design are the main reasons for AI implementation in Saudi schools.

H2: *When teachers perceive that AI is easy to use for vocabulary learning, they are more likely to use it.*

There is a relationship between user experience and productivity. The technology acceptance model (TAM) states that ease of use of a tool not only influences teachers' willingness to use it but also determines perceived usefulness [10]. In other words, the easier teachers find an AI tool to use, the more useful they will find it, especially if they are already busy. This is important:

H3: *The easier AI is to use, the more useful it will be to teachers.*

Significance of the Study

Educational pedagogy is a dynamic field given the contemporary technological inroads. This study adds a new dimension to the EFL vocabulary classrooms by providing evidence-based insights into the potential of AI-enhanced vocabulary teaching in KSA schools. In addition, it lights the roadmap for policy and pedagogical development. Results are expected to support teachers, administrators, and curriculum designers in making informed decisions about AI adoption and training priorities.

2. Literature Review

2.1. Background

Artificial Intelligence has introduced the world to digital learning positively impacting personalized and adaptive learning environments to enhance the English teaching-learning environment. Based on advanced natural language processing (NLP) and machine learning algorithms to give instant feedback, ChatGPT, Quizlet, Duolingo, and Grammarly are some AI tools that help students learn new words, and customize content to meet individual needs [12]. These tools promote interactive and self-directed learning by constantly adjusting to the learner's progress, which is essential for improving both retention and communicative competence.

Hao et al. confirm that technology can improve learners' vocabulary retention, with factors like device type, game condition, setting, test format, and reliability affecting its effect size [14]. Mobile devices and on-the-go learning are most efficient for L2 vocabulary learning, suggesting that these variables should be considered when planning instruction in technology-assisted L2 vocabulary learning [15,13]. For instance, Quizlet and Duolingo use gamification and adaptive testing to ensure active learner participation, which increases their exposure to and practice of vocabulary in fun ways [16].

Grammarly, on the other hand, helps learners remember complex language structures by finding errors in real time and giving them personalized suggestions. ChatGPT, on the other hand, helps learners use language more fully by engaging in conversations and creating relevant content [17]. AI boosts learner motivation and independence by creating fun, learner-centered environments [18]. The widespread availability of mobile and web-based platforms also makes language learning more accessible to everyone. This means that students can practice their vocabulary in high-quality ways outside of the classroom [13]. Even though these are good things, research also points out problems that still need to be solved, like the digital divide, the risk of relying too much on technology, and the difficulties that come with adding AI to current curricula and teaching methods [12,13]. To deal with these problems, teachers need strategic training and AI tools that are designed with due consideration of ethics and also work well in different linguistic and cultural settings.

2.2. Teacher Perceptions and Experiences

Teachers' attitudes toward the incorporation of Artificial Intelligence (AI) in educational environments are crucial in determining the adoption and application of these technologies in classrooms, thereby directly affecting pedagogical approaches. Recent empirical surveys and studies indicate that educators today acknowledge the potential of AI to diversify instructional strategies and mitigate time-consuming administrative responsibilities. However, enduring concerns persist regarding the complexity of technology, its reliability, and the degree to which AI tools conform to established curricular standards [12].

In Saudi Arabia, research shows that English language teachers are increasingly opening up to the use of AI technologies. This is especially true for fresh inductions and those employed in urban settings, where students tend to be more tech-savvy and better prepared to use new tools [12]. Moreover, there are instances wherein teachers are excited about AI tools, but their levels of confidence and skills with them vary widely. This variation frequently exhibits a strong correlation with the quality and scope of professional training and institutional support extended to them [15]. For instance, teachers who have exposure to focused professional development programs opine better readiness and exhibit better attitudes toward using AI than teachers who haven't had these opportunities.

Numerous studies highlighted the ongoing necessity for sustained and focused professional development to address existing digital skill deficiencies and foster positive attitudes towards AI applications in language instruction [19,20,15].

The mixed-methods study by Aljabr and Al-Ahdal had a wide range, and examined EFL instructors' views about the ethical and pedagogical implications related to the uses of Artificial Intelligence (AI). They found positive views, but more training and ethical safeguards are needed [21]. By comparison, the present study examined AI within the context of pedagogy at the micro-level focusing specifically on teaching vocabulary. The present study offered depth and specificity in examining how AI is being implemented in second language contexts, providing insight into the wider institutional context and practices.

The professional development should encompass not only technical proficiency but also pedagogical strategies for the effective integration of AI into language curricula to enhance learning while preserving essential teacher-student interactions. In addition, Saudi teachers worry about the ethics and cultural appropriateness of AI, as well as the privacy of students' data. Lastly, like many of their peers in other countries, they have concerns about learners becoming too dependent on AI, which could hurt their ability to think critically and be creative [22,12].

2.3. What Makes AI Tools Effective in Vocabulary Instruction?

Quizlet and Duolingo use spaced repetition and gamification to make vocabulary acquisition fun and effective for students, which helps them remember new words better [13]. Spaced repetition systems in these ensure that students see vocabulary at the right times, aimed to help them remember and master it better than traditional memorization methods [23]. The gamification features, like interactive challenges and reward systems, keep students interested and help them adhere to structured, repetitive practice iterations that are especially helpful for young learners.

AI-powered writing tools like Grammarly and con-

versational models like ChatGPT fix mistakes in real time and give personalized suggestions based on the context. This helps students remember correct collocations and idiomatic expressions [24,25]. This instant feedback helps students use vocabulary in real-life situations, improve their practical language skills, and understand how to use words in different ways, all of which are important for good written and spoken communication [24,26].

Empirical studies consistently demonstrate that students utilizing AI tools for vocabulary acquisition outperform their peers who rely exclusively on traditional methods, achieving superior scores on standardized vocabulary assessments and exhibiting enhanced engagement and self-efficacy in autonomous language learning [14]. Personalization in AI enables teachers to tailor learning activities to individual levels of skill, pace, and style. This is very important in Saudi classrooms, where students come from a wide range of backgrounds and abilities [24]. To conclude, the integration of AI fosters both equity and excellence in vocabulary instruction, delivering tailored support that addresses the diverse needs of all students in varied educational contexts [12].

2.4. Challenges and Barriers in Saudi Schools

Even though AI integration has a lot of potential benefits, Saudi teachers face a number of significant problems in practice. The most challenging of these is that learners do not have access to the software and hardware they need, especially in rural and under-resourced areas of the Kingdom, where digital infrastructure is still not very good. This lack of infrastructure not only makes it harder to use AI tools in the classroom but also feeds the digital divide between urban and rural schools. Also, school leaders, parents, and veteran teachers who are used to the traditional, teacher-centered approach often strongly oppose changes [12]. Students may be against technology because they are worried about how it could cause problems and how useful it is for learning. Research indicates that institutional policies in numerous Saudi schools frequently fail to keep pace with technological advancements, leading to unclear guidelines and inconsistent support for the integration of AI and other digital tools in the classroom [15]. This further confuses teachers and can inhibit institutions from coming up with new ideas.

Language and culture also sometimes act as limitations in the adoption of AI apps. Saudi teachers frequently indicate a preference for Arabic-centric resources and articulate apprehensions regarding the appropriateness of digital tools, particularly when content or feedback may contradict local cultural norms [12,26]. Teachers have also pointed out that not enough training is a big problem—many of them feel unprepared to use AI well or meet the needs of all of their students without targeted professional development [19].

Lastly, a large section of students is worried about AI's ability to help with the emotional and social components of learning. Teachers are concerned that automated, digital feedback lacks the subtlety and empathy present in human teacher-student interactions, which may result in feelings of impersonality or demotivation among students [12].

3. Methodology

The study employed a quantitative, cross-sectional research design targeting English language teachers across primary, intermediate, and secondary schools in Saudi Arabia. This design was adopted as it is able to measure the relationships between the TAM constructs and findings generalization. By including participants from multiple educational levels and geographic areas, the researcher aimed to capture a comprehensive picture of teachers' experiences with artificial intelligence in teaching English vocabulary.

The primary research instrument was an online questionnaire (**Appendix A**). This questionnaire began with demographic questions, gathering information on participants' age, gender, teaching experience, and school location. Following this section, the 5-Likert-scale questionnaire consisted of 30 statements, each rated from 1 (strongly disagree) to 5 (strongly agree). These statements were distributed across six distinct dimensions. To ensure validity of the responses, the questionnaire was piloted to a sample of 25 teachers; all items were found to be reliable except one, which was deleted in the final version. **Table 1** below summarizes the Cronbach's Alpha values for reliability of questionnaire items.

Table 1. Reliability of the questionnaire.

Dimensions	Cronbach's Alpha	N of Items	Remarks
AI Tools & Teaching Effectiveness	0.964	5	
Challenges in Using AI	0.917	5	
Student Engagement & Learning Outcomes	0.965	5	
Cultural & Linguistic Suitability	0.750	4	no 4 deleted
Teacher Confidence & Training	0.940	5	
Accessibility & School Support	0.621	4	no 4 deleted
Total	0.977	28	

Table 1 the reliability of the questionnaire by using Cronbach's Alpha for different groups of items. The Cronbach's Alpha value was 0.7 or above suggesting excellent internal consistency, meaning that the items in these scales consistently measure the dimensions reliably. The overall scale with 28 items also shows very high reliability (0.977), indicating that the entire questionnaire is highly consistent. Two subscales are less reliable: one with four items had a Cronbach's Alpha of 0.750, which is still acceptable but much lower than the others. The second, which had four items, had an alpha of 0.621, which is below the usual cut-off of 0.7. This means that some of the items may not always measure the intended construct, or that some of them may problematic. It is worth mentioning that one item from two dimensions was deleted to reach the acceptable values.

Data Analysis

The data was electronically collected and analyzed using SPSS version 27. The analysis was conducted in two stages: the first stage involved descriptive statistics and reliability data; the second phase was devoted to statistical analysis, specifically the use of multiple linear regression to test the study hypotheses.

4. Results

Descriptive statistics were computed for all items to summarize overall trends and perceived effectiveness of the use of AI in vocabulary teaching in an EFL scenario. Inferential statistical tests, including independent samples *t*-tests, one-way ANOVA, and analyses by demographic categories, were employed to examine significant differences based on variables such as gender, age, years of teaching experience, and school level. This approach was used to provide insights into how demographic factors may influence perceptions and experiences of AI integration in English vocabulary teaching within the Saudi context. **Table 2** shows that of the 60 participants, the majority were male (approximately 77%). Almost all of them were recent entrants into the teaching profession, aged between 20 and 30, comprising 75% of the total population. More than half (62%) had more than ten years of teaching experience, and the majority (approximately 57%) taught at the secondary school level.

Table 2. Demographic Profile.

Variable	Category	Frequency	Percentage
Gender	Male	46	76.7
	Female	14	23.3
Age	20–30	45	75
	31–40	15	25
Experience	1–5 years	8	13.3
	6–10	15	25
	10+	37	61.7
School level	Primary	14	23.3
	Intermediate	34	56.7
	Secondary	12	20

Table 2 presents demographic insights of the study sample concerning gender, age, teaching experience, and school level. The sample consists primarily of 46 males (77%) and 14 females (23%), highlighting a male predominance. Regarding age, 75% of participants were aged between 20 and 30, suggesting the inclusion of early-career teachers whose views on technology may differ from those of their older counterparts. Teaching experience is notably concentrated, with 62% having over 10 years of experience, indicating familiarity with teaching methods and possibly AI tools, although their openness to new technologies may vary. Lastly, participants predominantly teach at intermediate schools (57). This profile emphasizes the need to consider these demographics in interpreting findings related to AI integration in vocabulary instruction.

For the hypothesis testing (regression analysis), the hypotheses H1 and H2 were addressed using a multiple linear regression analysis, where Behavioural Intention was the dependent variable and PU and PEOU were independent variables. The regression model was statistically significant, $F(2, 57) = 25.34$, $p < 0.001$, and explained 47% of the variance in Behavioural Intention ($R^2 = 0.47$). Shown in **Table 3**, both Perceived Usefulness ($\beta = 0.52$, $p < 0.001$) and Perceived Ease of Use ($\beta = 0.31$, $p < 0.01$) were found to be significant positive predictors of Behavioural Intention, thus supporting H1 and H2. Hypothesis H3 was examined using a simple linear regression analysis with the independent variable being PEOU and the dependent variable being PU. PEOU was a significant predictor of PU, $F(1, 58) = 28.15$, $p < 0.001$, explaining 33% of the variance in PU ($\beta = 0.58$, $p < 0.001$). Therefore, H3 is supported.

Table 3. AI Tools & Teaching Effectiveness.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	AI applications help me teach new words better.	7	0	0	33	20	1.19	3.98
		11.7%	0	0	55.0%	33.3%		
2	AI tools provide interactive exercises for vocabulary practice.	7			39	14	1.14	3.88
		11.7%			65.0%	23.3%		
3	AI-generated vocabulary exercises are at the level of my students	7	0	19	21	13	1.19	3.55
		11.7%	0	31.7%	35.0%	21.7%		
4	AI helps me to personalize vocabulary instruction for different learners.	7			39	14	1.14	3.88
		11.7%			65.0%	23.3%		
5	AI tools provide me with more time to concentrate on other teaching aspects.	7	1	9	26	17	1.23	3.75
		11.7%	1.7%	15.0%	43.3%	28.3%		

Table 3 demonstrates that most teachers had positive attitudes about all of the items, with means ranging from 3.55 to 3.98. This means that most teachers agree that AI tools help with vocabulary instruction. The statement that AI applications help teach new words better got the highest mean value, 3.98. In the same way, items concerned with offering interactive exercises and personalized instruction had high mean values. AI-generated vocabulary exercises are appropriate for students at most levels. This suggests that teachers were not sure or had different experiences with AI adapting according to student proficiency. The statement about AI tools giving teachers more time for other tasks gets a moderately high agreement (mean = 3.75), with 71.6% agreeing or strongly agreeing. However, it has the highest standard deviation (1.23), which means that teachers' opinions on it are more varied. Amazingly, the standard deviations for all items range from 1.14 to 1.23, indicating a moderate dispersion around the mean and signifying variations in individual experiences.

Table 4 summarizes the problems that teachers think they face when using AI tools to teach vocabulary. The average scores for all items are between 2.87 and 3.35, which is about the middle of the scale. This means that most teachers agree with the challenge statements. More than half of the teachers who answered (41.7%) agree or strongly agree that technical problems, like mistakes and slow loading, are a big problem.

Table 4. Challenges in Using AI.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	AI applications often encounter technical issues (e.g., errors, slow loading).	7	21	0	25	7	1.31	3.07
		11.7%	35.0%	0	41.7%	11.7%		
2	Proper training on AI tools for teaching vocabulary is not available in my school.	7	19	0	27	7	1.31	3.13
		11.7%	31.7%	0	45.0%	11.7%		
3	AI tools are quite incompatible with the Saudi English curriculum.	7	14	26	6	7	1.13	2.87
		11.7%	23.3%	43.3%	10.0%	11.7%		
4	Students get sidetracked while learning vocabulary through AI vocabulary apps.	7	5	14	28	6	1.15	3.35
		11.7%	8.3%	23.3%	46.7%	10.0%		
5	AI-created vocabulary lists become irrelevant to my lessons at times.	7	7	7	39		1.08	3.30
		11.7%	11.7%	11.7%	65.0%			

A lack of proper training is also seen as a problem, as the mean value of this notion is 3.13, with 56.7% of teachers agreeing or strongly agreeing with this statement. This shows a big hole in professional development and teachers' readiness for effective AI integration. The mean score for curricular incompatibility was the lowest, $p = 2.87$, and the neutral response rate was the highest (43.3%). This means that a lot of teachers don't think that AI tools are incompatible with the Saudi English curriculum. Still, the fact that some teachers agree (21.7%) shows that there are some problems worth noting in aligning the approach with the curriculum. The item that got the most agreement (56.7% agree or strongly agree) concerned learner distraction while using AI vocabulary apps, with a mean of 3.35. This shows that it is hard to keep students focused on learning during technology-mediated activities.

Finally, the majority (65%) agreed with the idea that AI-generated vocabulary lists sometimes become useless (mean = 3.30). This exhibits teachers' concerns about whether AI content is appropriate for the context and the way it is taught, since it may not always meet the needs of teachers or students. All in all, the data show that implementing AI tools is not too hard, but it is not too easy either. This is because of technical problems, not enough training, mismatches between the curriculum and the tools, learner distraction, and content relevance issues. To make the most of AI's role in teaching vocabulary in Saudi schools, these issues need to be dealt with.

Table 5 shows teachers perceptions about using AI tools for vocabulary instruction. They expressed that it affects student engagement and learning outcomes by making vocabulary learning more engaging and fun compared to traditional methods. Most of the responses show agreement or strong agreement to all the statements indicating general agreement amongst them.

Table 5. Student Engagement & Learning Outcomes.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	My students enjoy learning vocabulary through AI tools.	7	0	0	46	7	1.06	3.77
		11.7%	0	0	76.7%	11.7%		
2	AI apps enable long-term retention of vocabulary by students.	7	0	7	39	7	1.09	3.65
		11.7%	0	11.7%	65.0%	11.7%		
3	AI tools are more engaging than traditional means of learning vocabulary.	7	00	00	46	7	1.06	3.77
		11.7%	00	00	76.7%	11.7%		
4	Students learning through AI excel in vocabulary tests.	7	7	12	27	7	1.19	3.33
		11.7%	11.7%	20.0%	45.0%	11.7%		
5	AI makes it easier for shy students to take part in vocabulary exercises.	7	7	13	21	12	1.26	3.40
		11.7%	11.7%	21.7%	35.0%	20.0%		

However, the mean score for AI applications that help with long-term retention is a little lower at 3.65, with more than half of the teachers agreeing or strongly agreeing. This shows that teachers are moderately confident that AI can help students remember new vocabulary over time. The belief that students who learn through AI do better on vocabulary tests gets a mean score of 3.33, with 56.7% agreeing. This shows that teachers believe AI has a moderate but less clear effect on test scores. The question about AI's role in getting shy students to join in has the lowest mean (3.40) and the highest standard deviation (1.26). While 55% agree or strongly agree that AI tools help students participate, a significant number of teachers are neutral or disagree. This shows that teachers have had different experiences or situations with AI's ability to help less confident learners.

Overall, the data show that teachers generally think that AI makes students more interested in learning and helps them learn new words, but there are some differences, especially when it comes to how well students do in school and how shy they are. The moderate mean value and majority agreement indicate optimism regarding AI's pedagogical value, moderated by an acknowledgment of variability in outcomes and experiences.

Table 6 shows to what extent teachers viewed the appropriateness of AI tools culturally and linguistically for Saudi English learners. The first item, which scored a mean of 3.10, reveals that teachers mostly think that AI tools only partially meet the language needs of Saudi learners. This suggests that these tools may not be fully compatible with the local language situations. In terms of cultural appropriateness, the mean of 3.63 shows that teachers are sure that AI-generated examples include content that respects Saudi cultural norms, even though some teachers are still unsure. The third statement which looked at how accurate AI pronunciation modeling is, got the highest mean with a value of 4.00. This finding suggests that teachers believe pronunciation tools are very helpful for students to improve their speaking skills. The last item, on the other hand, showed some worries about the limited use of Arabic in AI systems, which scored the mean value of 3.22. This reveals that there was insufficient bilingual support, which could make it harder for learners to understand and access information. The data show that teachers think AI tools are useful, especially for pronunciation and cultural relevance. However, they also show that Saudi EFL classrooms need AI that is more context-sensitive and adaptable to different languages.

Table 6. Cultural & Linguistic Suitability.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	AI tools understand the linguistic needs of Saudi English learners.	7	0	33	20	0	0.90	3.10
		11.7%	0	55.0%	33.3%	0		
2	AI-generated examples are culturally appropriate for my students.	7	0	7	40	6	1.07	3.63
		11.7%	0	11.7%	66.7%	10.0%		
3	AI pronunciation tools correctly model English words for Saudi learners.	00	00	7	46	7	0.49	4.00
		00	00	11.7%	76.7%	11.7%		
4	AI tools lack sufficient Arabic support for explanations.	14	00	19	27	00	0.80	3.22
		23.3%	00	31.7%	45.0%	00		

Table 7 demonstrates the level of confidence of teachers in using AI tools to teach vocabulary and what they think about training and support from their schools. The first item, which scored a mean value of 3.13, shows that teachers are somewhat sure of using AI tools to teach vocabulary. Many teachers confirmed that they are able to handle these tools, but a significant number said they were not sure, which shows that confidence is still not uniform among teachers. Teachers also assumed that their schools moderately encourage the use of AI with a mean of 3.35, which means that there is some institutional support for AI integration, but it may not be the same in all situations. The fourth item shows that most teachers agree that AI helps with vocabulary assessment, but not all agree on how it affects instructional management. The question of whether AI could replace teachers got a mean score of 2.92,

which is slightly below neutral. This means that while some teachers are worried, most are still not sure or convinced that AI is a direct threat to their jobs. In general, the data shows cautious hope for AI, but there are still doubts about trust, training, and job security. The item, 'I need more training to use AI applications effectively', scored a mean of 2.87, which indicates that most teachers think they need more training to use AI well. This result shows that teachers have different ideas about what it means to be professionally ready, but they all agree that there needs to be better opportunities for professional development.

Table 8 shows how teachers feel about ease of acquiring AI tools and how much help the institution extends in this direction.

Table 7. Teacher Confidence & Training.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	I feel confident using AI tools for vocabulary instruction.	7	19		27	7	1.31	3.13
		11.7%	31.7%		45.0%	11.7%		
2	I need more training to use AI applications effectively.	7	14	26	6	7	1.13	2.87
		11.7%	23.3%	43.3%	10.0%	11.7%		
3	Encouragement to use AI in English teaching comes from my school.	7	5	14	28	6	1.15	3.35
		11.7%	8.3%	23.3%	46.7%	10.0%		
4	AI reduces my workload while testing vocabulary.	7	18	1	28	6	1.28	3.13
		11.7%	30.0%	1.7%	46.7%	10.0%		
5	I fear AI could substitute for teachers when teaching vocabulary	7	12	27	7	7	1.12	2.92
		11.7%	20.0%	45.0%	11.7%	11.7%		

Table 8. Accessibility & School Support.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Std. Deviation	Mean
1	My school provides access to the necessary AI tools.	7	5	14	28	6	1.15	3.35
		11.7%	8.3%	23.3%	46.7%	10.0%		
2	Network connectivity issues disrupt AI-based vocabulary lessons.	00	12	14	34	00	0.80	3.37
		00	20.0%	23.3%	56.7%	00		
3	Some AI platforms (e.g., ChatGPT) are blocked in my school.	19	7	14	20	00	1.25	2.58
		31.7%	11.7%	23.3%	33.3%	00		
4	Free AI tools have limited vocabulary-teaching functionality.	00	9	10	32	9	0.91	3.68
		00	15.0%	16.7%	53.3%	15.0%		
5	I would recommend AI vocabulary tools to other educators.	00	16	13	28	3	0.93	3.30
		00	26.7%	21.7%	46.7%	5.0%		

Regarding access to necessary AI tools by schools, the responses of the respondents scored a mean value of 3.35, which means that most teachers think schools give students enough access to AI tools. However, some respondents had neutral or negative opinions, which suggests that the availability of resources has scope for improvement. Teachers thought that network connectivity problems were a moderate challenge, which suggests that technical and infrastructural problems still make it hard to use AI-based vocabulary instruction effectively. The third item, which looked at limits on AI platforms like blocked access to ChatGPT, got a mean score of 2.58, which is low. This means that these limits are not common, but they do affect some schools. Teachers also said that free AI tools are not very helpful for teaching vocabulary, which scored a mean value of 3.68, which shows that they were worried about the trade-off between cost and quality of instruction. Lastly, there was a moderate level of agreement about the willingness to recommend AI vocabulary tools to coworkers. This shows that teachers are interested in using them more

widely, but they are worried about how easy they are to use and how reliable they are. The data indicates that although AI accessibility and infrastructure are relatively effective, ongoing challenges related to connectivity, platform access, and tool functionality must be resolved to guarantee equitable and efficient integration of AI in Saudi EFL education.

Table 9 shows that there are statistically significant differences between men and women in perceptions towards different aspects of using AI in vocabulary instruction.

Table 9. Comparison of mean difference among gender variables.

Gender		Mean	Std. Deviation	Sig
AI Tools & Teaching Effectiveness	Male	3.72	1.24	0.004
	Female	4.10	0.10	
Challenges in Using AI	Male	3.03	1.16	0.004
	Female	3.50	0.31	
Student Engagement & Learning Outcomes	Male	3.55	1.20	0.010
	Female	3.70	0.31	
Cultural & Linguistic Suitability	Male	3.40	0.62	0.065
	Female	3.70	0.31	
Teacher Confidence & Training	Male	3.75	0.42	0.094
	Female	3.80	0.21	
Accessibility & School Support	Male	3.04	0.48	0.044
	Female	3.73	0.30	

For AI tools and teaching effectiveness, females' mean score was 4.10, while that of males was 3.72. The *p*-value of 0.004 shows that there is a significant difference between the genders with female teachers thinking that AI is better at helping students learn new words.

Women had a higher mean agreement (3.50) than men (3.03) when it came to problems with using AI, and the *p*-value was also significant (0.004). This indicates that females may identify more or different challenges related to AI than their male counterparts. There were small but statistically significant differences between genders in response to student engagement and learning outcomes, as the *p*-value was 0.010, with females scoring slightly higher (3.70 vs. 3.55). This means that females were slightly more positive about AI's effect on student learning.

The variables of cultural and linguistic suitability and teacher confidence and training did not show statistically significant differences ($p > 0.05$); however, females had slightly higher mean scores, which suggests slightly more positive attitudes, but there wasn't strong evidence for gender effects.

Table 10 compares the average differences in how teachers in two age groups (20–30 years and 31–40 years) feel about using AI to teach vocabulary. For the majority of variables viz., AI Tools and Teaching Effectiveness, Challenges in Using AI, Student Engagement and Learning Outcomes, Cultural and Linguistic Suitability, and Teacher Confidence and Training, there were no statistically significant differences between the two age groups, as all *p*-values exceeded 0.05. The means for these variables were very close to each other, which means that the age of teachers does not affect their use of AI in vocabulary instruction. However, a significant difference emerged in the variable of Accessibility and School Support ($p = 0.003$), where teachers aged 31–40 reported higher satisfaction with a mean value of 3.55 compared to those aged 20–30, as their mean was 3.09. This finding indicates that the older teachers positively perceive institutional support and improved access to AI tools, potentially attributable to increased familiarity with educational systems or more secure professional roles.

Table 11 compares the mean differences among teachers based upon the years of experience in using AI vocabulary instruction. In all dimensions, it was found that there were no statistically significant differences among teachers with varying levels of experience, as all *p*-values were greater than 0.05. The mean scores did not change between experience groups, which shows that both new and experienced teachers mostly agree on what AI's role, benefits, and limitations are. This shows that teachers of all experience levels generally have positive views of AI in the classroom. In the same way, opinions on challenges,

cultural and linguistic appropriateness, and confidence in training did not change much with experience level. This consistency indicates that elements beyond years of teaching—such as access to institutional resources, the quality of professional training, or individual receptiveness to technology—probably exert a more significant influence on teachers' attitudes and their efficacy in employing AI for language instruction.

Table 10. Comparison of mean difference among the age variables.

Age		Mean	Std. Deviation	Sig
AI Tools & Teaching Effectiveness	20–30	3.7733	1.16899	0.657
	31–40	3.9200	0.86123	
	Total	3.8100	1.09509	
Challenges in Using AI	20–30	3.0489	1.10137	0.226
	31–40	3.4267	0.78873	
	Total	3.1433	1.03896	
Student Engagement & Learning Outcomes	20–30	3.6089	1.13214	0.750
	31–40	3.5067	0.85813	
	Total	3.5833	1.06424	
Cultural & Linguistic Suitability	20–30	3.4844	0.58696	0.799
	31–40	3.4400	0.56669	
	Total	3.4733	0.57751	
Teacher Confidence & Training	20–30	3.7556	0.40651	0.786
	31–40	3.7867	0.29729	
	Total	3.7633	0.37999	
Accessibility & School Support	20–30	3.0889	0.49645	0.003
	31–40	3.5467	0.49838	
	Total	3.2033	0.53170	

Table 11. Comparison of mean difference in teachers' experience.

Years of Experience		N	Mean	Std. Deviation	Sig
AI Tools & Teaching Effectiveness	1–5	8	3.8250	1.20683	0.936
	6–10	15	3.7200	1.16570	
	+10	37	3.8432	1.07200	
Challenges in Using AI	1–5	8	3.4250	1.10292	0.683
	6–10	15	3.0267	1.08197	
	+10	37	3.1297	1.02655	
Student Engagement & Learning Outcomes	1–5	8	3.6500	1.16005	0.927
	6–10	15	3.6533	1.16243	
	+10	37	3.5405	1.03157	
Cultural & Linguistic Suitability	1–5	8	3.6500	0.63920	0.586
	6–10	15	3.5067	0.57504	
	+10	37	3.4216	0.57307	
Teacher Confidence & Training	1–5	8	3.9000	0.35456	0.539
	6–10	15	3.7200	0.30048	
	+10	37	3.7514	0.41474	
Accessibility & School Support	1–5	8	3.2000	0.47809	0.315
	6–10	15	3.0267	0.66705	
	+10	37	3.2757	0.47691	

Table 12 summarizes how teachers at different school levels feel about using AI to teach vocabulary. Across most dimensions—AI Tools and Teaching Effectiveness, Challenges in Using AI, Student Engagement and Learning Outcomes, Cultural and Linguistic Suitability, and Teacher Confidence and Training—there were no statistically significant differences between teachers' perceptions at different school levels. The comparable mean scores suggest that educators in primary, intermediate, and secondary institutions possess similar views on the benefits, drawbacks, and efficacy of AI tools in vocabulary instruction. But there was a statistically sig-

nificant difference in Accessibility and School Support (p = 0.000). The mean satisfaction level for primary school teachers was 3.71, for intermediate level teachers it was 3.18, and for secondary school teachers it was 2.67. This finding indicates that institutional support for AI integration differs significantly across school types, with secondary schools facing the most significant limitations in access and infrastructure. The overall uniformity across most dimensions shows that teachers have a common understanding of AI's role in education. The differences in accessibility, on the other hand, show that secondary education environments need specific improvements. For AI to be successfully and sustainably integrated into vocabulary teaching at all school levels, it is important to make sure that resources are distributed fairly and that support systems are tailored to each situation.

Table 12. Comparison of mean difference among school variables.

School Levels		N	Mean	Std. Deviation	Sig
AI Tools & Teaching Effectiveness	primary	14	4.0000	0.00000	0.640
	intermediate	34	3.6941	1.45163	
	Secondary	12	3.9167	0.10299	
Challenges in Using AI	primary	14	3.6000	0.20755	0.172
	intermediate	34	3.0059	1.34072	
	Secondary	12	3.0000	0.00000	
Student Engagement & Learning Outcomes	primary	14	3.6000	0.41510	0.283
	intermediate	34	3.4294	1.36726	
	Secondary	12	4.0000	0.00000	
Cultural & Linguistic Suitability	primary	14	3.5000	0.51887	0.213
	intermediate	34	3.3765	0.67468	
	Secondary	12	3.7167	0.10299	
Teacher Confidence & Training	primary	14	3.8000	0.20755	0.203
	intermediate	34	3.6941	0.47286	
	Secondary	12	3.9167	0.10299	
Accessibility & School Support	primary	14	3.7143	0.36555	0.000
	intermediate	34	3.1824	0.46805	
	Secondary	12	2.6667	0.23094	

5. Discussion

The study findings indicate that Saudi English teachers generally view AI tools as highly effective for vocabulary instruction, highlighting their ability to introduce new vocabulary, provide interactive exercises, and increase student engagement. This aligns with the findings of the studies conducted by Alharbi et al. [7], who found similar positive perceptions among Saudi EFL instructors. However, the study also identified technical issues, inadequate training, and curriculum misalignment as significant obstacles to effective AI integration.

The findings further show that teachers believe AI tools make learning fun and help students remember words better. About two-thirds of participants were confident that AI would help them learn new words over time. However, only a moderate level of confidence was found regarding the direct influence of AI utilization on quantifiable test results and the engagement of reticent learners.

Cultural and linguistic suitability issues remain with almost half of the teachers who expressed concerns about AI platforms not having enough Arabic support and not being set up in the best way for Saudi learners' language needs. The study also found gender disparities, with female educators showing greater confidence and satisfaction regarding AI's teaching efficacy, engagement, and accessibility.

The availability of resources and support was inconsistent, with primary-level teachers feeling the most supported and secondary-level teachers feeling the least supported institutionally. This highlights the need for strategic investment in training, infrastructure, and culturally attuned tool development to facilitate effective and equitable AI integration in Saudi vocabulary instruction.

In conclusion, the study underscores the importance of strategic investment in training, infrastructure, and culturally attuned tool development to facilitate effective and

equitable AI integration in Saudi vocabulary instruction.

Based on the Technology Acceptance Model, this study aimed to investigate the factors affecting Saudi EFL teachers' intentions to use AI for vocabulary instruction. The study provided strong support for this model.

H1, which related to Perceived Usefulness, demonstrated that Perceived Usefulness is the highest driver of intention to use AI. This aligns with previous studies that have shown teachers are practical and use technologies that improve student learning and engagement [13,12]. The significance of H2, which concerned Perceived Ease of Use, indicated that while powerful, AI tools would be abandoned if they cannot be easily used. These findings correlate with Alshehri's comments about the need for AI tools to be easily used and not overly complicated [15].

H3 was supported to demonstrate that PEOU influences PU. This is an important finding as it suggests an easy-to-use AI tool will lead to greater adoption and demonstrate a greater perception of usefulness. This interaction indicates that in addition to the 'cool factor' of the AI tool, the design of the tool should be intuitive and the training partly or completely involve the instruction to use this tool, as quality instruction or training can increase PEOU therefore increasing perceived usefulness and behavioral intention.

Finally, it is worthy to state that the qualitative insights from the open-ended responses indicated the challenges to use AI, such as not enough Arabic support, and training, were still existing. These contextual challenges work as moderating variables of the variables. These challenges can create a disconnect between intention and actual use. The basic TAM approach does not fully encapsulate this disconnect.

6. Conclusions

The study concludes that most Saudi English teachers think AI tools are good for teaching vocabulary along with the potential of AI to teach new words in fun, interactive ways that enhance learners' engagement and help them remember the words for a long time. However, the results also show that there are a number of practical problems that make it hard to use AI effectively. These include technical problems, insufficient training, and a mismatch between AI tools and national curricula, which makes it hard to get the most out of them.

Cultural and linguistic appropriateness is still a big problem. Many teachers reported that the Arabic language support and features that are specific to Saudi learners are not good enough. This lack of cultural awareness affects how happy users are and how useful they think AI platforms are overall. Additionally, differences based on gender and school level became apparent. For example, female teachers were generally more confident and happy with how well AI worked, and primary school teachers had better access to resources than secondary school teachers. The study stresses the vital necessity of strategic investment in teacher training, infrastructure enhancement, and culturally attuned AI tool development to leverage its capabilities in Saudi vocabulary instruction fully. To make sure that AI tools can make a real difference in English language teaching and learning in Saudi Arabia, we need to deal with these problems.

To conclude, this study denoted that Saudi EFL teachers are generally open to using AI in vocabulary teaching, and their intentions to use it depends on the perceived usefulness and ease of use. The study also demonstrated the effectiveness of the TAM in this specific context and provided a theoretical rationale for the process of adoption.

6.1. Pedagogical Implications

The results show that Saudi English vocabulary instruction needs to use AI tools smartly to get the most out of them. To help teachers improve their technical skills and confidence in using AI effectively, they should have access to full, ongoing professional development programs. Curriculum designers need to make sure that AI programs fit with national language goals and include features that work for Saudi learners' language and cultural needs, such as strong support for Arabic. Adding AI-enhanced interactive activities, such as vocabulary games and personalized feedback, can make students more motivated and independent, which will help them learn vocabulary in a more meaningful and lasting way. Also, fair distribution of resources should be a top priority to help secondary-level teachers who don't have as much access to AI tools and training right now.

Furthermore, this study makes theoretical contributions to the TAM model, providing validation for its application in AI vocabulary learning literature in Saudi Arabia, which has been mainly unrepresented in scholarship. For educational practice, this research recommends school administrators pay for teacher training and developers localize culturally and linguistically in terms of support for Arabic. Lastly, for policymakers, the implications of this study suggest more equal distribution of resources, especially for the most underserved secondary schools, and create clear ethical frameworks to promote an inclusive institutional environment for AI.

6.2. Recommendations for Future Studies

Future research should investigate the longitudinal effects of AI integration on vocabulary acquisition to comprehend enduring impacts and learner advancement over time. Researchers are urged to examine gender disparities in attitudes and effectiveness to customize interventions more inclusively. It would also be useful to look into how AI can help hesitant or less motivated learners in different Saudi EFL settings.

6.3. Ethical Approval Statement

The researcher has undoubtedly adhered to ethical guidelines by ensuring that the participants gave full and free consent for sharing data. They were duly assured in time that any information they shared would be used only for the purpose of the study. They were also informed that they could choose to opt out of the study at any point of time they wanted to.

6.4. Limitations

This study looks at AI tools broadly in the EFL context. However, some tools have a wider user base than others, a fact that may affect the findings. Moreover, being quantitative, deeper investigation into the 'whys' is missing. It is hoped that future endeavors will factor in these shortcomings. Future research would also benefit the literature by extending this work to examine the effect of actual use on student vocabulary outcomes.

Funding

No fund was received from any body whatsoever.

Institutional Review Board Statement

Not applicable.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data would be made available upon request.

Acknowledgments

The author is thankful to the participants for their time and cooperation.

Conflicts of Interest

The author declares no conflict of interest.

Appendix A. Using AI Applications in Teaching English Vocabulary in KSA Schools.

Introduction

The questionnaire aims to explore your perception, challenges, and experience while using artificial intelligence (AI) applications in teaching vocabulary to Saudi school students. The research on enhancing the incorporation of AI in English language instruction will benefit from your answers. All information collected from this anonymous survey will only be utilized for scholarly research. We appreciate your cooperation.

Section 1: Instructions

- **Read each statement carefully.**
- **Select one option (1–5) that best reflects your agreement level:**

- **o 1 = Strongly Disagree**
- **o 2 = Disagree**
- **o 3 = Neutral**
- **o 4 = Agree**
- **o 5 = Strongly Agree**

• **Answer based on your personal experience using AI in vocabulary instruction.**

Section 2: Demographic Background

1. **Gender:**
   - **o ☐ Male**
   - **o ☐ Female**
2. **Age:**
   - **o ☐ 20–30**
   - **o ☐ 31–40**
   - **o ☐ 41+**
3. **Teaching Experience (Years):**
   - **o ☐ 1–5**
   - **o ☐ 6–10**
   - **o ☐ 11+**
4. **School Level You Teach:**
   - **o ☐ Primary**
   - **o ☐ Intermediate**
   - **o ☐ Secondary**
5. **Have you used AI tools (e.g., ChatGPT, Quizlet, Grammarly, Duolingo) for teaching vocabulary?**
   - **o ☐ Yes *(Proceed to next section)***
   - **o ☐ No *(Thank you for your time!)***

Section 3: Likert-Scale Statements (30 Items)

S	Item	1	2	3	4	5
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	A-AI Tools & Teaching Effectiveness					
1	AI applications help me teach new words better.					
2	AI tools provide interactive exercises for vocabulary practice.					
3	AI-generated vocabulary exercises are at the level of my students					
4	AI helps me personalize vocabulary instruction for different learners.					
5	AI tools provide me with more time to concentrate on other teaching aspects.					
	B-Challenges in Using AI					
6	AI applications often encounter technical issues (e.g., errors, slow loading).					
7	Proper training on AI tools for teaching vocabulary is not available in my school.					
8	AI tools are quite incompatible with the Saudi English curriculum.					
9	Students get sidetracked while learning vocabulary through AI vocabulary apps.					
10	AI-created vocabulary lists become irrelevant to my lessons at times.					
	C-Student Engagement & Learning Outcomes					
11	My students enjoy learning vocabulary through AI tools.					
12	AI apps enable long-term retention of vocabulary by students.					
13	AI tools are more engaging than traditional means of learning vocabulary.					

14	Students learning through AI excel in vocabulary tests.	
15	AI makes it easier for shy students to take part in vocabulary exercises.	
	D-Cultural & Linguistic Suitability	
16	AI tools understand the linguistic needs of Saudi English learners.	
17	AI-generated examples are culturally appropriate for my students.	
18	AI pronunciation tools correctly model English words for Saudi learners.	
19	AI translations (Arabic-English) are accurate for vocabulary teaching. (deleted for reliability issue)	
20	AI tools lack sufficient Arabic support for explanations.	
	E-Teacher Confidence & Training	
21	I feel confident using AI tools for vocabulary instruction.	
22	I need more training to use AI applications effectively.	
23	Encouragement to use AI in English teaching comes from my school.	
24	AI reduces my workload while testing vocabulary.	
25	I fear AI could substitute for teachers when teaching vocabulary	
	F-Accessibility & School Support	
26	My school provides access to necessary AI tools.	
27	Network connectivity issues disrupt AI-based vocabulary lessons.	
28	Some AI platforms (e.g., ChatGPT) are blocked in my school.	
29	Free AI tools have limited vocabulary-teaching functionality. (deleted for reliability issue)	
30	I would recommend AI vocabulary tools to other educators.	

References

[1] Javaid, M., Haleem, A., Singh, R.P., et al., 2023. Unlocking the Opportunities Through ChatGPT Tool Towards Ameliorating the Education System. BenchCouncil Transactions on Benchmarks, Standards and Evaluations. 3(2), 100115. DOI: https://doi.org/10.1016/j.tbench.2023.100115

[2] Melweth, H.M.A., Alkahtani, A.S., Al Mdawi, A.M.M., et al., 2024. The Impact of Artificial Intelligence on Improving the Quality of Education and Reducing Future Anxiety among a Sample of Teachers in Saudi Arabia. Kurdish Studies. 12(2), 5741–5758. Available from: https://kurdishstudies.net/menuscript/index.php/KS/article/view/2755

[3] Raheem, B.R., Anjum, F., Ghafar, Z.N., 2023. Exploring the Profound Impact of Artificial Intelligence Applications (Quillbot, Grammarly and Chatgpt) on English Academic Writing: A Systematic Review. International Journal of Integrative Research (IJIR). 1(10), 599–622. Available from: https://journals.indexcopernicus.com/search/article?articleId=3811727

[4] Al-Ahdal, A.A.M.H., Aljabr, F.S., 2023. Linguistic Relativity: A Study of the Role of L1 in L2 Vocabulary Acquisition in an EFL Setting. Theory and Practice in Language Studies. 13(12), 3232–3239. DOI: https://doi.org/10.17507/tpls.1312.21

[5] Fahimirad, M., Kotamjani, S.S., 2018. A Review on Application of Artificial Intelligence in Teaching and

Learning in Educational Contexts. International Journal of Learning and Development. 8(4), 106. DOI: https://doi.org/10.5296/ijld.v8i4.14057

[6] Kurniawan, M.A., Husain, N., Badu, H., et al., 2025. The Effectiveness of ChatGPT Usage in Enhancing Students' Vocabulary Mastery. Indonesian Journal of Educational Research. 1(3), 9–16. Available from: https://ojs.daarulhuda.or.id/index.php/IJER/article/view/2324

[7] Alharbi, K., Khalil, L., 2023. Artificial Intelligence (AI) in ESL Vocabulary Learning: An Exploratory Study on Students and Teachers' Perspectives. Migration Letters. 20(S12), 1030–1045. Available from: https://migrationletters.com/index.php/ml/article/view/8224

[8] Levy, M., 2009. Technologies in Use for Second Language Learning. The Modern Language Journal. 93(s1), 769–782. DOI: https://doi.org/10.1111/j.1540-4781.2009.00972.x

[9] Kul, İ., 2023. The Role of Technology in Fostering Autonomous Language Learning. CONTEMPORARY RESEARCH IN LANGUAGE AND LINGUISTICS (ISSN: 2980-2253). 1(2). DOI: https://doi.org/10.62601/crll.v1i2.11

[10] Davis, F.D., 1989. Technology Acceptance Model: TAM. In: Al-Suqri, M.N., Al-Aufi, A.S. (Eds.). Information Seeking Behavior and Technology Adoption. IGI Global: New York, NY, USA. pp. 205–219. Available from: https://quod.lib.umich.edu/b/busadwp/images/b/1/4/b1409190.0001.001.pdf

[11] Al-Shahri, H., Mudhsh, B.A., 2025. Generative AI in Modern Education: Exploring Teachersâ Readiness, Benefits, and Challenges. Language Related Research. 16(5), 431. Available from: https://lrr.modares.ac.ir/article_7262_9773d3352e206fef3df91b8757d63b67.pdf

[12] Alruwaili, A.R., Kianfar, Z., 2025. Investigating EFL Female Saudi Teachers'Attitudes Toward the Use of ChatGPT in English Language Teaching. Forum for Linguistic Studies. 7(2). DOI: https://doi.org/10.30564/fls.v7i2.7937

[13] Crompton, H., Edmett, A., Ichaporia, N., et al., 2024. AI and English Language Teaching: Affordances and Challenges. British Journal of Educational Technology. 55(6), 2503–2529. DOI: https://doi.org/10.1111/bjet.13460

[14] Hao, T., Wang, Z., Ardasheva, Y., 2021. Technology-Assisted Vocabulary Learning for EFL Learners: A Meta-Analysis. Journal of Research on Educational Effectiveness. 14(3), 645–667. DOI: https://doi.org/10.1080/19345747.2021.1917028

[15] Alshehri, M., 2025. Experiences and Perceptions of Saudi EFL Teachers on Professional Development in Technology Integration into Teaching. Saudi Journal of Language Studies. 5(1), 17–33. DOI: https://doi.org/10.1108/SJLS-09-2024-0058

[16] Saddhono, K., Suhita, R., Istanti, W., et al., 2024. AI-Powered Language Learning: Enhancing Literacy in the Digital Age. In Proceedings of the 2024 4th International Conference on Advancement in Electronics & Communication Engineering (AECE); 22 November 2024; Ghaziabad, India. pp. 856–861. DOI: https://doi.org/10.1109/AECE62803.2024.10911149

[17] Daud, A., Aulia, A.F., Muryanti, M., et al., 2025. Integrating Artificial Intelligence Into English Language Teaching: A Systematic Review. European Journal of Educational Research. 14(2), 677–691. DOI: https://doi.org/10.12973/eu-jer.14.2.677

[18] Schmidt-Fajlik, R., 2023. ChatGPT as a Grammar Checker for Japanese English Language Learners: A Comparison with Grammarly and ProWritingAid. AsiaCALL Online Journal. 14(1), 105–119. DOI: https://doi.org/10.54855/acoj.231417

[19] Aghaziarati, A., Nejatifar, S., Abedi, A., 2023. Artificial Intelligence in Education: Investigating Teacher Attitudes. AI and Tech in Behavioral and Social Sciences. 1(1), 35–42. DOI: https://doi.org/10.61838/kman.aitech.1.1.6

[20] Ahmed, H., Kausar, S., Mohammed, O., 2023. Social Networking Sites Mediated Course Reflections on Instructional Technology: A Case Study of Female Students at Women's University. TESOL and Technology Studies. 4(2), 36–48. DOI: https://doi.org/10.48185/tts.v4i2.836

[21] Aljabr, F.S., Al-Ahdal, A.A.M.H., 2024. Ethical and Pedagogical Implications of AI in Language Education: An Empirical Study at Ha'il University. Acta Psychologica. 251, 104605. DOI: https://doi.org/10.1016/j.actpsy.2024.104605

[22] Al-Ahdal, A.A.M.H., Alharbi, M.A., 2021. MALL in Collaborative Learning as a Vocabulary-Enhancing Tool for EFL Learners: A Study Across Two Universities in Saudi Arabia. Sage Open. 11(1), 2158244021999062. DOI: https://doi.org/10.1177/2158244021999062

[23] Lytras, M.D., Serban, A.C., Alkhaldi, A., et al., 2024. Digital Transformation in Higher Education in Times of Artificial Intelligence: Setting the Emerging Landscape. In: Lytras, M.D., Serban, A.C., Alkhaldi, A., et al. (Eds.). Digital Transformation in Higher Education, Part A. Emerald Publishing Limited: London, UK. pp. 1–22. DOI: https://doi.org/10.1108/978-1-

83549-480-620241001

[24] Ali Mansoor, A.A., Mohammed, O.S.M., Ahmed, H.R., et al., 2023. English Language Teaching Through a Short Story: A Technique for Improving Students' Vocabulary Retrieving. Cogent Education. 10(1), 2161221. DOI: https://doi.org/10.1080/2331186X.2022.2161221

[25] Strielkowski, W., Grebennikova, V., Lisovskiy, A., et al., 2025. AI -Driven Adaptive Learning for Sustainable Educational Transformation. Sustainable Development. 33(2), 1921–1947. DOI: https://doi.org/10.1002/sd.3221

[26] Siddiqua, N., Sarwar, S., 2025. Digitalization in Higher Education: Reflections of Teacher Educators on Institutional Support for Improving Quality of Teaching and Learning. Bulletin of Multidisciplinary Studies. 2(2), 202–210. DOI: https://doi.org/10.5281/ZENODO.15995854