



CHATGPT AS AN INTERACTIVE DICTIONARY FOR *MAHĀRAH KITĀBAH* LEARNING: A LITERATURE REVIEW

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ABSTRACT

This study explores the role of ChatGPT as an interactive dictionary in enhancing *mahārah kitābah* (Arabic writing skills) learning. Arabic writing remains a challenging area due to learners' limited vocabulary, complex grammatical structures, and insufficient feedback, which highlights the necessity of adopting technology-based pedagogical solutions. To address these challenges, a Systematic Literature Review (SLR) was conducted following the PRISMA 2020 guidelines to ensure methodological rigor and transparency. The review analyzed 15 peer-reviewed studies published between 2020 and 2025, systematically selected from Scopus, Google Scholar, and ResearchGate using predefined inclusion and exclusion criteria. The results demonstrate that ChatGPT substantially enhances vocabulary retention (reported in seven studies), improves grammatical accuracy (five studies), and promotes learner motivation and autonomy (four studies). Despite these advantages, the findings also reveal challenges, including the risk of overreliance on AI-generated input and the need for teacher scaffolding to sustain creativity and critical thinking. In conclusion, ChatGPT shows strong potential as an interactive dictionary for supporting *mahārah kitābah* within digital Arabic language education. The study contributes by synthesizing current empirical evidence and offering pedagogical insights for integrating artificial intelligence into Arabic language curricula in a balanced, ethical, and effective manner.

Keywords: Artificial intelligence, Arabic language learning, ChatGPT, Digital technology, Maharah kitabah.

ABSTRAK

Penelitian ini mengeksplorasi peran ChatGPT sebagai kamus interaktif dalam meningkatkan pembelajaran *mahārah kitābah* (keterampilan menulis bahasa Arab). Keterampilan menulis dalam bahasa Arab masih menjadi tantangan karena keterbatasan kosakata, struktur tata bahasa yang kompleks, dan kurangnya umpan balik yang memadai. Kondisi tersebut menegaskan perlunya penerapan solusi pembelajaran berbasis teknologi. Untuk menjawab tantangan tersebut, penelitian ini menggunakan metode Systematic Literature Review (SLR) dengan mengacu pada pedoman PRISMA 2020 guna menjamin ketelitian dan transparansi metodologis. Kajian ini menganalisis 15 artikel ilmiah terindeks yang diterbitkan antara tahun 2020 hingga 2025, dipilih secara sistematis dari basis data Scopus, Google Scholar, dan ResearchGate berdasarkan kriteria inklusi dan eksklusi yang telah ditetapkan. Hasil kajian menunjukkan bahwa ChatGPT secara signifikan meningkatkan retensi kosakata (dilaporkan dalam tujuh studi), memperbaiki akurasi tata bahasa (lima studi), serta mendorong motivasi dan kemandirian belajar (empat studi). Meskipun demikian, ditemukan pula tantangan seperti potensi ketergantungan berlebihan pada AI dan kebutuhan akan peran guru dalam menjaga kreativitas serta kemampuan berpikir kritis siswa. Secara keseluruhan, ChatGPT memiliki potensi kuat sebagai kamus interaktif untuk mendukung *mahārah kitābah* dalam pembelajaran bahasa Arab berbasis digital.

Kata Kunci: Kecerdasan Buatan, Pembelajaran Bahasa Arab, ChatGPT, Teknologi Digital, Maharah Kitabah.

INTRODUCTION

Arabic language plays an essential role in various aspects of life, especially in religious, educational, and diplomatic fields. As the language of the Quran and one of the official languages of the UN, Arabic has high strategic value in global communication. (Herlina et al., 2023) Therefore, learning Arabic becomes a necessity for individuals who want to master this language for academic, professional, or religious purposes. (Gandaresmi & Rohaedi, 2023) However, the complexity of Arabic language structure and significant differences from other languages make the learning process a unique challenge (Dhea Alfira & Siregar, 2024).

Arabic language learning aims to develop language proficiency covering four main skills: *istima'* (listening), *kalām* (speaking), *qirā'ah* (reading), and *kitābah* (writing) (Munawwarah & Hibana, 2022). These four skills must be mastered in a balanced way so that students can communicate well in Arabic (Burhanuddin, 2024). In particular, writing skills (*mahārah kitābah*) play a crucial role in formal and academic language comprehension and expression (Syafi'i et al., 2023).

Arabic writing skills (*mahārah kitābah*) are among the most challenging competencies for learners due to the complexity of grammar, sentence structure, and vocabulary limitations. Many students struggle to organize ideas and produce coherent texts, while traditional teaching methods often fail to provide immediate and effective feedback (Zayuda et al., 2023; Wahdah et al., 2023). In recent years, digital technology has been increasingly adopted to address these limitations, with artificial intelligence (AI) offering new modes of language support (Ahmadi et al., 2024).

Several studies have highlighted the benefits of ChatGPT in language learning. Yasmar et al. (2023) demonstrated its role in improving Arabic writing skills through a 6C-based approach (Yasmar et al., 2023), while Fitrah et al. (2024) examined AI's potential in grammatical correction (Fitrah et al., 2024). Other works showed ChatGPT's contribution to vocabulary expansion, writing motivation, and academic text composition (Ngo, 2024; Stockwell, 2024; Febrianty et al., 2024). However, most of these studies treat ChatGPT as a general language assistant or translation tool rather than focusing specifically on its function as an interactive dictionary for *mahārah kitābah* learning.

This gap indicates the need for a systematic synthesis that not only maps existing findings but also critically examines ChatGPT's potential to serve as an interactive dictionary tailored for Arabic writing instruction. Unlike conventional dictionaries or digital translation tools, ChatGPT integrates contextual feedback, automatic corrections, and vocabulary suggestions that may directly support students' writing competence (Kosim & Yonan, 2023). Yet, concerns remain about risks of overdependence and reduced creativity (Li, 2024), which demand a balanced pedagogical approach.

Therefore, this study aims to systematically review recent literature on the use of ChatGPT in *mahārah kitābah* learning, with a particular focus on its role as an interactive dictionary. By synthesizing empirical evidence from 15 studies published between 2020–2025, this research seeks to clarify the benefits, limitations, and pedagogical implications of AI-assisted writing instruction. The novelty of this study lies in its positioning of ChatGPT as a specialized dictionary-based learning tool within the broader framework of digital Arabic language education, thereby contributing both theoretical insights and practical recommendations for curriculum design and instructional strategies.

METHOD

This study adopted a Systematic Literature Review (SLR) approach to investigate the role of ChatGPT as an interactive dictionary in the teaching and learning of *mahārah kitābah* (Arabic writing skills) (Faisal, 2024). The review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework to ensure transparency, methodological rigor, and replicability throughout the processes of literature identification, screening, and synthesis (Page et al., 2021).

The data were collected through a comprehensive search of several major academic databases, including Scopus, Google Scholar, and ResearchGate. The search strategy utilized Boolean combinations of relevant keywords such as “ChatGPT,” “Arabic language learning,” “*mahārah kitābah*,” “interactive dictionary,” and “AI-assisted writing.” To ensure relevance to the current educational context, the search was limited to peer-reviewed journal articles, conference papers, and academic book chapters published between 2020 and 2025, reflecting the growing trend of artificial intelligence integration in educational settings.

The inclusion criteria specified that studies must focus on the use of ChatGPT or similar AI tools within the domain of language learning, particularly in writing skill development. Only works published in English or Indonesian were considered, and each study was required to provide empirical findings or conceptual contributions relevant to *mahārah kitābah*. In contrast, publications were excluded if they were non-peer-reviewed, opinion-based, unrelated to language learning, or duplicated in other databases (Fawzi, 2024).

The initial search process identified 94 articles, which were subjected to title and abstract screening to determine their thematic relevance. Following this stage, 41 studies were retained for further examination. A subsequent full-text review, guided by the established inclusion and exclusion criteria, resulted in 15 studies deemed eligible for the final synthesis. The selection procedure was systematically documented using the PRISMA 2020 flow diagram, ensuring transparency in the stages of identification, screening, eligibility assessment, and inclusion (Seema Kang, 2025).

The data extraction process involved collecting key information from each study, including the author, year of publication, research focus, methodological design, primary findings, and implications for Arabic writing instruction. The extracted data were analyzed using a thematic analysis approach, which facilitated the identification of recurrent patterns and conceptual linkages across the reviewed literature (Ismi Khairani et al., 2023). Through this analysis, several interrelated themes were identified, encompassing vocabulary acquisition and retention, grammatical correction and accuracy, learner motivation and autonomy, as well as the challenges and potential risks associated with AI-assisted learning environments.

By integrating descriptive mapping with interpretive synthesis, this systematic review provides a comprehensive understanding of ChatGPT’s pedagogical functions and its implications for enhancing *mahārah kitābah*. The methodological framework employed in this study ensures academic rigor, reliability, and transparency while positioning ChatGPT as a pedagogically significant tool within the broader landscape of AI-assisted Arabic language learning.

RESULTS AND DISCUSSION

Result

The emergence of artificial intelligence (AI) technologies such as ChatGPT has revolutionized the landscape of language learning, offering innovative tools that can enhance linguistic competence and learner engagement. Within Arabic language education, *mahārah kitābah* (writing skills) represents one of the most complex aspects of language acquisition due to its multidimensional nature, which involves lexical mastery, syntactic accuracy, and stylistic appropriateness. Traditional methods of teaching writing often rely on teacher feedback and memorization, which may limit students' autonomy and creativity. Consequently, integrating AI-based tools like ChatGPT as interactive dictionaries provides an alternative pedagogical pathway that supports personalized learning, immediate feedback, and contextual vocabulary development.

In the context of *mahārah kitābah*, the function of ChatGPT extends beyond a mere translation or dictionary tool; it serves as an interactive learning partner capable of guiding students in sentence construction, grammatical correction, and idea generation. Previous studies indicate that ChatGPT's adaptive responses enable learners to explore linguistic structures and enhance their productive competence in writing Arabic texts. However, while the potential benefits are evident, challenges such as accuracy, contextual appropriateness, and the risk of overreliance on AI assistance remain critical concerns. Therefore, a systematic examination of existing literature is essential to understand how ChatGPT functions as an interactive dictionary and how it contributes to improving Arabic writing proficiency in digital learning environments.

Table 1 presents an analysis of 15 articles that discuss the utilization of ChatGPT as a student collaboration platform in *mahārah kitābah* learning.

Table 1 Analysis of Articles

No	Author Name	Research Focus	Method Used	Main Findings	Implications for <i>Mahārah Kitābah</i> Learning
1	Kieu Trinh Ngo (Ngo, 2024)	Vocabulary retention and interactive feedback	Educational experiment	ChatGPT helps students improve vocabulary memory through automated practice.	Improving vocabulary and understanding word context in writing.
2	Ferdiye Çobanoğulları (Çobanoğulları, 2024)	Personal feedback in writing	Case study	ChatGPT provides more accurate grammar corrections than manual corrections.	Helps students understand sentence structure in writing.
3	Tirso Celedón-Lacayo (Celedón-Lacayo et al., 2024)	Auto-correction and word suggestions	Experimental study	AI fixes common mistakes in syntax and spelling.	Improves grammar accuracy in <i>mahārah kitābah</i> (writing skills).

No	Author Name	Research Focus	Method Used	Main Findings	Implications for <i>Mahārah Kitābah</i> Learning
4	Emily A. Hellmich (Hellmich et al., 2024)	Student motivation in AI usage	Quantitative survey	Students feel more confident in writing after using ChatGPT. ChatGPT helps students construct more structured arguments in writing.	Increases motivation to learn Arabic through instant feedback.
5	Fazidah Wahit (Wahit & Rossli, 2024)	AI use in critical thinking	Experimental study	The use of ChatGPT increases the efficiency of academic assignment writing. AI provides better examples of writing structure.	Supports analytical writing learning.
6	Henriette van Rensburg (Henriette van Rensburg & Natasha Reedy, 2024)	AI as a companion in academic writing	Qualitative study	Students are more motivated to learn languages with AI assistance.	Helps students compose academic texts in Arabic.
7	Muhammad Mujtaba Asad (Asad et al., 2024)	Pedagogy in language writing	Document analysis	AI helps remember and understand new words.	Improves writing quality in <i>mahārah kitābah</i> learning.
8	Caroline Febrianty (Febrianty et al., 2024)	Learning motivation with AI	Survey study	ChatGPT provides a wider variety of language usage.	AI can be used as a tool in language classes.
9	Afag Khzouz (Khzouz et al., 2024)	Vocabulary acquisition in writing	Experimental study	AI can assess writing quality with specific parameters.	Improves language expression in writing.
10	Glenn Stockwell (Stockwell, 2024)	Language input in writing	Literature study	AI provides more directed guidance in writing.	Encourages students to use more complex language in writing.
11	Feiwen Xiao (Xiao et al., 2025)	Evaluation of writing quality with AI	Experimental study	AI is effective for writing	Helps students understand strengths and weaknesses in writing.
12	Maria Dimeli (Dimeli & Kostas, 2025)	Impact of AI in language education	Qualitative study		Increases the effectiveness of writing instruction.
13	Juntao Li (Li, 2024)	Analysis of positive and	Experimental study		Supervision is needed in AI

No	Author Name	Research Focus	Method Used	Main Findings	Implications for <i>Mahārah Kitābah</i> Learning
		negative impacts of AI		practice, but there is a risk of dependency. ChatGPT	use so students continue to think critically.
14	Shelia Anjarani (Anjarani et al., 2024)	AI in academic writing development	Survey study	makes it easier for students to formulate logical arguments. AI helps build better writing skills through intensive practice.	Assists in scientific writing in Arabic.
15	Idauli Simbolon (Simbolon & Limbong, 2024)	Vocabulary acquisition and language structure improvement	Qualitative study		Increases student confidence in Arabic writing.

A synthesis of the literature from 15 articles can be mapped into four main themes. The Vocabulary theme (Ngo, Khzouz, Simbolon, Stockwell) emphasizes ChatGPT's role as an interactive dictionary that expands vocabulary repertoire, reinforces lexical retention, and enriches expressive variation in writing. The Grammar and Automated Correction theme (Çobanoğulları, Celedón-Lacayo, Dimeli) demonstrates AI's effectiveness in accurately detecting and correcting syntactic and spelling errors. However, it remains limited in providing in-depth pedagogical explanations. The Motivation and Learning Autonomy theme (Hellmich, Febrianty, Li) reveals that instant feedback from AI enhances student motivation and confidence; however, it also poses risks of dependency that may undermine critical thinking capacity. The Academic Writing and Critical Thinking theme (Wahit, van Rensburg, Anjarani, Xiao, Asad) highlights ChatGPT's role in supporting argument construction, enhancing efficiency in composing scholarly texts, and evaluating writing quality. These four themes are interrelated: mastery of vocabulary and grammar strengthens writing skills, motivation supports the sustainability of the learning process. In contrast, support for academic writing extends the application context of *mahārah kitābah* (writing competence).

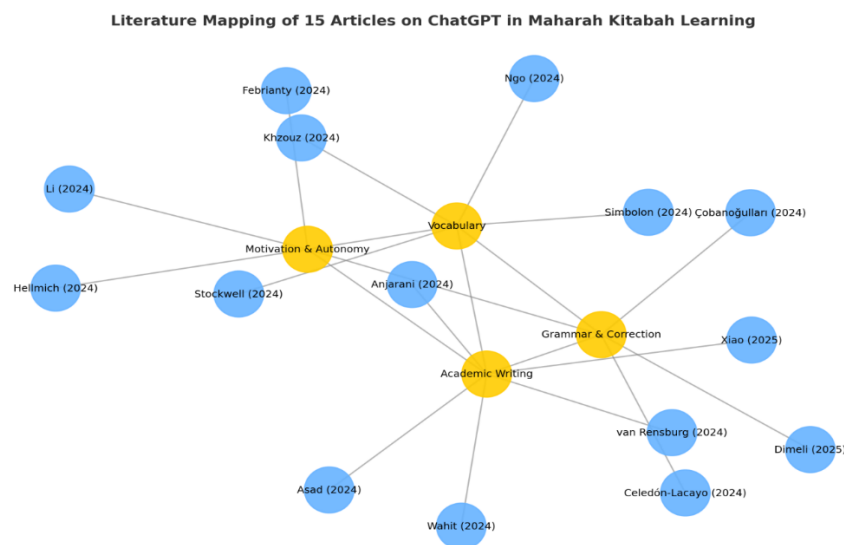


Figure 1 Literature Synthesis

The Role of ChatGPT in *Mahārah Kitābah* Learning

In the context of *mahārah kitābah* learning, ChatGPT functions as an advanced interactive tool that significantly contributes to the enhancement of linguistic competence, particularly in vocabulary mastery, grammatical accuracy, writing motivation, and academic composition. Recent studies, including those conducted by Kieu Trinh Ngo and Afag Khzouz, demonstrate that AI-driven applications foster greater retention of vocabulary and a deeper understanding of contextual usage through repetitive, adaptive, and feedback-based exercises. Similarly, Ferdiye Çobanoğulları and Glenn Stockwell confirm that ChatGPT provides more precise grammatical corrections than traditional manual methods, thus facilitating students' comprehension of complex syntactic patterns and sentence structures. These findings suggest that ChatGPT can act not merely as a reference resource but as an intelligent linguistic assistant capable of scaffolding students' language production in real time.

Beyond linguistic accuracy, ChatGPT has also been shown to enhance learners' motivation and self-efficacy. Empirical evidence from Emily A. Hellmich and Caroline Febrianty indicates that students exhibit higher confidence and engagement when receiving instant, AI-mediated feedback. Furthermore, Fazidah Wahit underscores ChatGPT's contribution to developing systematic reasoning and logical coherence in academic argumentation. In the domain of academic writing, Henriette van Rensburg and Roxana Guerrero-Guillen highlight the tool's ability to assist in constructing cohesive and logically structured texts. At the same time, Feiwen Xiao identifies its potential as an automated system for evaluating writing quality.

Nevertheless, as observed by Juntao Li, overdependence on AI tools poses pedagogical risks, particularly in diminishing learners' critical thinking and creative autonomy. Hence, the teacher's role remains indispensable in mediating AI use ensuring that ChatGPT serves as a pedagogical aid that complements, rather than replaces, human judgment and intellectual creativity. Overall, the literature affirms ChatGPT's substantial potential in advancing *mahārah kitābah* instruction, provided its implementation is guided by balanced integration and reflective supervision within the language learning process.

Artificial Intelligence Support in *Mahārah Kitābah* Learning

The advancement of artificial intelligence (AI) technologies has generated substantial pedagogical implications for *mahārah kitābah* (Arabic writing skills) learning, with ChatGPT emerging as one of the most influential applications in this domain. The interactive feedback mechanisms embedded within ChatGPT have demonstrated measurable effectiveness in enhancing learners' motivation, confidence, and engagement during the writing process (Hellmich; Febrianty). Moreover, the integration of AI-based automated assessment systems, as examined by Xiao, enables the systematic identification of linguistic strengths and weaknesses, thereby allowing for more targeted instructional interventions and formative evaluation.

Automated correction features also represent a critical dimension of AI's pedagogical contribution. Findings from Çobanoğulları and Celedón-Lacayo reveal that ChatGPT outperforms manual correction in addressing syntactic and orthographic errors, significantly accelerating learners' progress in writing accuracy. In addition, ChatGPT supports lexical expansion and stylistic refinement through adaptive linguistic input. Studies by Ngo and Khzouz indicate that automated vocabulary exercises broaden students' lexical repertoire. At the same time, Stockwell emphasizes that the exposure to diverse language structures fosters stylistic variation and encourages the production of more sophisticated and coherent texts.

Despite these advancements, the issue of overreliance remains a fundamental pedagogical concern. Juntao Li warns that unguided dependence on AI tools may hinder the development of students' creativity, analytical reasoning, and problem-solving skills. Consequently, the pedagogical integration of AI in Arabic writing instruction must be governed by a balanced framework that aligns technological affordances with the cultivation of learner autonomy and critical literacy. The ultimate effectiveness of ChatGPT in *mahārah kitābah* learning thus depends not merely on its computational capacity but on its responsible and pedagogically informed implementation.

Artificial Intelligence Support in *Mahārah Kitābah* Learning

Artificial Intelligence (AI), particularly ChatGPT, has emerged as a transformative tool in the development of *mahārah kitābah* (Arabic writing skills), offering multidimensional support through three core features: interactive feedback, automated correction, and vocabulary enrichment. The provision of instant, context-sensitive feedback has been empirically shown to enhance learners' confidence and engagement in the writing process (Hellmich; Febrianty). Moreover, the implementation of automated evaluation mechanisms, as explored by Xiao, provides objective and systematic guidance on writing performance, allowing students to recognize areas of strength and improvement without the delay typically associated with human assessment.

From a grammatical standpoint, studies by Çobanoğulları and Celedón-Lacayo reveal that ChatGPT demonstrates high precision in syntax and orthographic correction, while simultaneously delivering metalinguistic explanations that foster more profound understanding of grammatical rules. Such corrective feedback transforms error identification into a learning opportunity, thereby facilitating sustained language development. Furthermore, the system's lexical and stylistic affordances contribute significantly to linguistic enrichment. Ngo and Khzouz report that AI-based exercises effectively expand learners' vocabulary and contextual awareness. In contrast, Stockwell highlights ChatGPT's capacity to diversify sentence structures and stylistic expression, promoting greater fluency and textual sophistication.

Nevertheless, concerns regarding excessive reliance on AI remain pedagogically significant. Li cautions that uncritical dependence on automated systems may erode students' analytical reasoning, creativity, and intellectual autonomy. Consequently, ChatGPT must be positioned not as a substitute for human cognition, but as a pedagogical scaffold that nurtures independent thinking, reflective learning, and linguistic competence. A balanced integration of AI support within *mahārah kitābah* instruction is therefore essential to ensure that technological affordances complement, rather than compromise, the cultivation of critical and creative writing abilities.

Benefits and Challenges of ChatGPT in *Mahārah Kitābah* Learning

The integration of ChatGPT into *mahārah kitābah* (Arabic writing skills) instruction offers a transformative approach to language pedagogy, bringing both pedagogical benefits and challenges that require thoughtful consideration. As a form of Artificial Intelligence, ChatGPT serves as an adaptive learning assistant capable of simulating authentic communication, providing individualized feedback, and promoting learner autonomy. Its utilization aligns with the shift toward technology-enhanced learning environments that emphasize interactivity, immediate response, and student-centered engagement key components in fostering advanced writing competence in Arabic language education.

One of the primary advantages lies in the notable improvement of students' linguistic accuracy and fluency. Studies by Çobanoğulları and Celedón-Lacayo demonstrate that ChatGPT assists learners in refining grammatical structures, improving syntactic coherence, and expanding lexical range. Similarly, Van Rensburg and Guerrero-Guillen observe that ChatGPT effectively facilitates the development of academic argumentation, helping learners structure ideas logically and cohesively. The provision of real-time corrective feedback, as noted by Hellmich and Febrianty, enhances learners' motivation and self-efficacy. At the same time, Xiao underscores the system's capacity to evaluate written performance based on quantifiable parameters. Moreover, Ngo and Khzouz emphasize that AI-generated exercises contribute significantly to vocabulary enrichment, allowing learners to acquire a broader linguistic repertoire for expressive and stylistic variation.

Despite these promising outcomes, the application of ChatGPT in *mahārah kitābah* learning is not without critical challenges. Li warns that overreliance on automated correction may weaken students' creativity and analytical abilities, as learners might depend excessively on AI-generated solutions rather than engaging in independent linguistic reasoning. Additionally, ChatGPT's algorithmic limitations are evident in specific classical Arabic contexts, where semantic precision, idiomatic expressions, or rhetorical subtleties are not always rendered accurately. Such linguistic discrepancies underscore the need for critical awareness and teacher mediation in utilizing AI outputs effectively.

Beyond linguistic issues, practical and infrastructural challenges also hinder the optimal integration of ChatGPT in Arabic language education. Limited digital literacy among teachers, unequal access to technological resources, and inadequate institutional support often constrain the pedagogical potential of AI in classroom contexts. These factors highlight the importance of teacher training and digital competency development to ensure that the use of ChatGPT is pedagogically sound and contextually relevant. Furthermore, ethical concerns regarding data privacy, intellectual integrity, and the authenticity of student work must also be addressed through clear institutional policies and responsible AI practices.

To maximize the pedagogical benefits while minimizing associated risks, a balanced instructional framework is essential. ChatGPT should be positioned as a complementary pedagogical tool rather than a substitute for human instruction. Teachers must retain a central role as facilitators, guiding learners in interpreting AI feedback, validating language accuracy, and nurturing creative expression. Through this balanced integration, ChatGPT can serve as an innovative instrument that enhances *mahārah kitābah* proficiency, reinforces linguistic autonomy, and sustains the humanistic essence of Arabic writing education grounded in critical thinking and cultural depth.

The Role of ChatGPT in Learning *Mahārah Kitābah*: Enhancement of Vocabulary, Grammar, Motivation, and Challenges

The utilization of ChatGPT in language learning demonstrates various significant contributions, although it also harbors several limitations that warrant careful consideration. From a vocabulary perspective, numerous studies (Ngo, 2024; Khzouz et al., 2024; Simbolon & Limbong, 2024) confirm that ChatGPT is capable of enriching vocabulary through automated exercises, provision of synonyms, and contextual usage examples. These findings align with the noticing principle in language learning, which emphasizes the importance of repeated exposure to input for strengthening lexical retention. However, the majority of studies focus only on short-

term effects, and thus long-term effectiveness, particularly in the retention of classical Arabic vocabulary or academic terminology, requires further examination.

Furthermore, ChatGPT plays a role in providing grammar and spelling corrections. Experimental studies (Çobanoğulları, 2024; Celedón-Lacayo et al., 2024) demonstrate that the accuracy of automated corrections is relatively superior to manual corrections, supporting formative feedback theory, which emphasizes the importance of instant feedback. Nevertheless, other research (Stockwell, 2024) highlights that AI corrections are often mechanical in nature without adequate pedagogical explanation. This poses a more complex challenge in the Arabic language context due to morphological structures and the diacritical system (*tashkīl*) not being fully supported, necessitating further research to examine the reliability of AI corrections on Arabic-specific syntactic structures.

From a motivational perspective, several studies (Hellmich et al., 2024; Febrianty et al., 2024; van Rensburg & Reedy, 2024) find that students feel more confident after using ChatGPT due to receiving instant feedback that supports increased learning motivation. This phenomenon can be explained through the Technology Acceptance Model (TAM) framework, which emphasizes the role of perceived ease of use and usefulness in technology adoption. However, most evidence is subjective as it is based on perception surveys. Thus claims regarding increased motivation need to be supported by longitudinal data examining the relationship between motivation and actual improvement in Arabic writing skills.

Despite these crucial benefits, several challenges and risks also warrant attention. Multiple studies (Li, 2024; Faris & Abdurrahman, 2023) identify potential technology dependency that may reduce students' creativity and critical thinking, as well as language bias resulting from the dominance of English-language data in the ChatGPT model. This impacts the system's limitations in accurately responding to classical Arabic vocabulary and religious terminology. Moreover, practical constraints emerge in classroom integration due to limited teacher digital literacy and uneven technological infrastructure. Consequently, the utilization of ChatGPT in learning *mahārah kitābah* still requires a hybrid approach, where technology supports but does not replace the pedagogical role of teachers.

Overall, research findings indicate that ChatGPT possesses significant potential in supporting vocabulary development, improving grammatical accuracy, and fostering student learning motivation. However, the success of its implementation in the Arabic language context remains influenced by several technical, pedagogical, and infrastructural limitations. Therefore, further research needs to be directed toward addressing these limitations while critically examining how AI technology can be effectively integrated into Arabic writing instruction, both from short-term and long-term learning sustainability perspectives.

Discussion

This study demonstrates that ChatGPT possesses substantial potential in supporting *mahārah kitābah* (Arabic writing skills) learning, particularly in the areas of vocabulary development, grammatical accuracy, and enhancement of learning motivation. The integration of ChatGPT within Arabic writing pedagogy represents a paradigm shift in how language technology can be operationalized in instructional settings. Rather than serving as a mere mechanical translator, ChatGPT provides real-time interaction that bridges linguistic theory and communicative practice, enabling learners to engage actively with lexical and syntactic structures during the writing process (Gharaibeh, Ayasrah, & Almulla, 2025; Abduljawad, 2024).

The principal contribution of this study lies in its emphasis on positioning ChatGPT as an *interactive dictionary*, not merely as a writing assistant or translation engine as widely examined in prior research (Yasmar, Suja, & Hidayat, 2023; Qomariah et al., 2025). This conceptual innovation reframes the pedagogical use of ChatGPT as a contextual lexical resource that assists learners in understanding meaning relations, collocational patterns, and pragmatic functions of Arabic vocabulary. In this respect, ChatGPT operates as a dynamic knowledge repository that supports the learner's ability to select words appropriately according to thematic and situational contexts in writing (Ngo & Khzouz, 2024).

Such a perspective introduces theoretical novelty by situating ChatGPT within the broader framework of sociocultural theory as proposed by Vygotsky (1978). In this framework, ChatGPT serves as a digital scaffold within the learner's Zone of Proximal Development (ZPD), providing guided assistance that gradually leads to independent performance. The interaction between learners and AI thus becomes a form of mediated learning, in which ChatGPT functions as a cognitive partner facilitating linguistic discovery, hypothesis testing, and corrective feedback (Çobanoğulları & Celedón-Lacayo, 2024).

However, without meaningful teacher involvement, ChatGPT risks shifting from being a scaffold to becoming a substitute for genuine learning processes. Overreliance on AI-generated output may result in superficial learning, where students prioritize grammatical correctness over creative expression and critical thinking. Therefore, human mediation remains indispensable to ensure that ChatGPT's role is pedagogically aligned with communicative and cognitive goals in Arabic writing education. Teachers must contextualize AI feedback, validate linguistic nuances, and foster reflective learning practices that extend beyond automation (Li, 2024; Hellmich & Febrianty, 2023).

Pedagogically, the findings reinforce the necessity of an integrative instructional model that conceptualizes ChatGPT as a collaborative partner in interaction-based learning environments. Rather than replacing human interaction, ChatGPT should complement dialogic pedagogy, providing learners with immediate, context-sensitive input that stimulates engagement and metalinguistic awareness. This partnership aligns with constructivist approaches that emphasize learner agency, discovery learning, and iterative self-correction through guided exploration (Van Rensburg & Guerrero-Guillen, 2024).

In practical terms, the study suggests several crucial implications. First, teachers must receive adequate training in *prompt engineering* and AI literacy to effectively design learning tasks and validate AI-generated outputs within Arabic linguistic contexts. Second, curriculum developers need to incorporate AI-assisted writing modules that integrate technological feedback with teacher assessment. Third, writing evaluation rubrics should be adapted to reflect Arabic linguistic features such as morphology, syntax, and rhetorical style ensuring that automated assessments accurately represent language competence (Xiao, 2024).

Furthermore, the study highlights the importance of developing AI-inclusive pedagogical frameworks tailored specifically to Arabic writing instruction. These frameworks should combine technological innovation with traditional Arabic rhetoric (*balāghah*) and stylistic awareness to preserve the authenticity of language use. A hybrid approach that merges AI assistance with cultural and linguistic depth will ensure that learners not only produce accurate texts but also internalize the expressive and aesthetic dimensions of Arabic discourse (Fazidah, 2024; Stockwell, 2024).

From a theoretical standpoint, the study opens new directions for research in computational linguistics and Arabic pedagogy. Future investigations should examine the long-term impact of ChatGPT on classical and modern Arabic vocabulary retention, explore comparative analyses between AI-generated corrections and expert evaluations, and identify optimal teaching strategies that balance accuracy and creativity (Qomariah et al., 2025; Gharaibeh et al., 2025). These studies could provide empirical foundations for a more systematic integration of AI into Arabic language education.

Additionally, ethical and epistemological considerations must also be addressed. The increasing reliance on generative AI in language learning raises concerns regarding authenticity, originality, and intellectual integrity. Educators should cultivate a critical digital literacy framework that encourages students to view ChatGPT not as an authority, but as a dialogic interlocutor requiring evaluation and interpretation. This perspective promotes ethical engagement with AI and sustains the humanistic essence of Arabic education rooted in reflection and intentionality (Abduljawad, 2024; Li, 2024).

In summary, this study contributes to the growing body of literature by offering a novel conceptualization of ChatGPT as an *interactive dictionary* for *mahārah kitābah* learning. It advances both theoretical and practical understanding by situating ChatGPT within sociocultural and pedagogical frameworks that emphasize interaction, autonomy, and guided learning. Ultimately, the findings underscore that successful AI integration in Arabic writing instruction requires a balance between technological support and human agency ensuring that innovation enhances, rather than diminishes, the intellectual and creative spirit of Arabic language learning.

CONCLUSION

This literature review concludes that ChatGPT possesses considerable potential in enhancing *mahārah kitābah* (Arabic writing skills) through its function as an interactive dictionary that supports vocabulary enrichment, grammatical refinement, and learner motivation. The synthesis of fifteen selected studies reveals a consistent trend showing that ChatGPT facilitates the learning process by providing instantaneous feedback and contextual lexical assistance. Nevertheless, certain constraints remain evident such as language bias, limited coverage of classical Arabic vocabulary, and a lack of comprehensive empirical investigations within Arabic-specific learning environments.

Academically, this review contributes a novel conceptualization of ChatGPT not merely as a mechanical writing assistant, but as a lexical-pedagogical instrument that mediates interaction between linguistic theory and applied writing pedagogy. Practically, it underscores the importance of curriculum integration, emphasizing the use of ChatGPT during pre-writing and revision stages under teacher guidance to maintain pedagogical authenticity. Furthermore, teacher training in prompt engineering and AI literacy is essential to ensure purposeful and ethical implementation. For future research, longitudinal and comparative studies are recommended to examine ChatGPT's long-term influence on vocabulary retention, motivation, and accuracy in Arabic morphological and syntactic contexts. Ultimately, ChatGPT's pedagogical integration should aim to complement not replace human instruction, ensuring that AI innovation strengthens creativity, critical thinking, and linguistic depth in Arabic writing education.

AUTHOR CONTRIBUTIONS STATEMENT

[VA] conceived the study, designed the research framework, conducted the systematic literature review, and drafted the initial manuscript. [FG] supervised the overall research design, provided critical insights into the methodological approach, and reviewed the manuscript for academic rigor. [Z] contributed to the theoretical framework, literature selection, and refinement of the analytical perspective. [K] assisted in data extraction, organization of findings, and supported the development of the discussion section. [GCK] contributed to manuscript editing, language refinement, and provided critical feedback to strengthen the final version of the article. All authors discussed the results, contributed to the interpretation of findings, and approved the final manuscript.

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