



Alibbaa': Jurnal Pendidikan Bahasa Arab

Special Issue Vol. 01 2026

P-ISSN: 2721-1606 | E-ISSN: 2716-4985

doi: <https://doi.org/10.19105/ajpba.vi.24671>

Artificial Intelligence and Local Wisdom Integration in Maharah Qira'ah Learning: A Systematic Literature Review

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Abstract

This study aims to synthesize the literature on the integration of Artificial Intelligence (AI), culture-based learning, and Maharah Qira'ah. Using a Systematic Literature Review (SLR) approach, 30 articles published between 2019 and 2026 were selected through predefined inclusion and exclusion criteria and analyzed using thematic synthesis. The findings indicate that AI supports personalized learning through adaptive instruction, automated feedback, and learning analytics. Culture-based learning enhances contextual relevance, learner engagement, and cultural identity, while digital innovations contribute to the development of reading literacy, reading comprehension, and critical reading skills. The review further reveals a strong conceptual relationship among these domains and proposes the concept of *AI-Assisted Culture-Based Maharah Qira'ah Learning* as a framework for adaptive, contextual, and culturally responsive Arabic reading instruction. This study contributes by bridging three research domains that have largely been examined separately and provides directions for future innovation in Arabic language education.

Keywords: *Artificial Intelligence; Culture-Based Learning; Local Wisdom; Maharah Qira'ah; Arabic Reading Skills; Systematic Literature Review*

Abstrak

Penelitian ini bertujuan untuk mensintesis literatur mengenai integrasi *Artificial Intelligence* (AI), pembelajaran berbasis budaya, dan Maharah Qira'ah. Penelitian menggunakan pendekatan *Systematic Literature Review* (SLR) terhadap 30 artikel yang dipublikasikan pada periode 2019–2026, yang dipilih berdasarkan kriteria inklusi dan eksklusi serta dianalisis

menggunakan *thematic synthesis*. Hasil penelitian menunjukkan bahwa AI mendukung personalisasi pembelajaran melalui pembelajaran adaptif, umpan balik otomatis, dan analitik pembelajaran. Pembelajaran berbasis budaya meningkatkan relevansi kontekstual, keterlibatan peserta didik, dan penguatan identitas budaya, sedangkan inovasi digital berkontribusi terhadap pengembangan literasi membaca, pemahaman bacaan, dan kemampuan membaca kritis. Sintesis literatur juga menunjukkan adanya keterkaitan konseptual yang kuat antara ketiga domain tersebut dan menghasilkan konsep *AI-Assisted Culture-Based Maharah Qira'ah Learning* sebagai kerangka pengembangan pembelajaran membaca bahasa Arab yang adaptif, kontekstual, dan responsif terhadap budaya. Penelitian ini berkontribusi dalam menjembatani tiga bidang kajian yang selama ini berkembang secara terpisah serta menawarkan arah baru bagi inovasi pembelajaran bahasa Arab di era transformasi digital.

Kata Kunci: Kecerdasan buatan; Pembelajaran Berbasis Budaya; Kearifan Lokal; Maharah Qira'ah; Keterampilan Membaca Bahasa Arab; *Systematic Literature Review*

Introduction

The rapid advancement of digital technology has significantly transformed the global educational landscape over the past decades. This transformation is reflected in the increasing integration of technology into learning processes, ranging from the provision of digital learning resources to the development of more interactive, flexible, and learner-centered learning environments.¹ More recently, Artificial Intelligence (AI) has emerged as one of the most influential innovations in education due to its capacity to support personalized learning, generate content automatically, provide real-time feedback, and adapt learning experiences to learners' needs and characteristics. The integration of AI has not only reshaped the role of technology in education but has also created new opportunities to develop more adaptive, effective, and relevant learning processes aligned with the demands of twenty-first-century education.²

In parallel with these developments, research on the application of Artificial Intelligence in language education has expanded

¹ Al-Abdullatif, Ahlam Mohammed, and Merfat Ayesah Alsubaie. "Using Digital Learning Platforms for Teaching Arabic Literacy: A Post-Pandemic Mobile Learning Scenario in Saudi Arabia." *Sustainability* 14, no. 19 (September 2022): 11868. <https://doi.org/10.3390/su141911868>.

² Kundu, Arnab, and Tripti Bej. "AI in School EFL Learning: A Systematic Review of Impact Pathways for Engagement, Achievement, and Satisfaction." *Journal of Language and Education* 11, no. 4 (December 2025): 131–48. <https://doi.org/10.17323/jle.2025.22083>.

considerably. Studies have reported the use of AI in various forms, including intelligent tutoring systems, adaptive learning systems, automated assessment, machine translation, speech recognition, and generative AI capable of producing instructional content dynamically and efficiently.³ Within language learning contexts, AI has been recognized for its potential to facilitate language skill development through personalized learning materials, individualized feedback, and interactive learning activities. Consequently, AI is increasingly viewed as a key component in the advancement of language education that responds to both learner needs and technological developments.

In Arabic language education, *Maharah Qira'ah* (reading skills) has received substantial scholarly attention. Reading is regarded as a fundamental competence because it enables learners to access knowledge, comprehend written information, and develop broader linguistic abilities.⁴ Previous studies have demonstrated that proficiency in *Maharah Qira'ah* is closely associated with vocabulary acquisition, grammatical competence, and the ability to interpret texts contextually. Therefore, reading skill development remains a primary objective of Arabic language instruction across educational levels.⁵

Alongside the growing emphasis on *Maharah Qira'ah*, numerous studies have highlighted a shift from conventional instructional approaches toward the use of digital technologies. Research has shown that websites, e-modules, interactive multimedia, and digital learning platforms contribute positively to learner engagement, learning motivation, vocabulary acquisition, and Arabic reading comprehension.⁶ These findings indicate that digital technology has become an important

³ Soh, Donny, Indriyati Atmosukarto, Tong Rong, Ian McLoughlin, Lim Jing Hao, Mohamed Sirajudeen, Justin Kan, et al. *Leveraging Generative AI for Primary School Mother Tongue Language Learning: A Scalable and Adaptive AI-Driven Approach*. 2026. https://doi.org/10.1007/978-3-032-16157-4_3.

⁴ Asadi, Ibrahim Abdalla, and Khaloob Kawar. "Learning to Read in Arabic Diglossia: The Relation of Spoken and Standard Arabic Language in Kindergarten to Reading Skills in First Grade." *Literacy Research and Instruction* 63, no. 4 (October 2024): 360–76. <https://doi.org/10.1080/19388071.2023.2217274>.

⁵ Mansour-Adwan, Jasmeen, Yasmin Shalhoub-Awwad, Ravit Cohen-Mimran, and Asaid Khateb. "Reading in Kindergarten Arabic-Speaking Children with Low Linguistic Skills: A Longitudinal Study." *Applied Psycholinguistics* 44, no. 2 (March 2023): 265–91. <https://doi.org/10.1017/S014271642300019X>.

⁶ Kosim, Nanang, Ade Arip Ardiansyah, Hilda Saripatul Hikmah, and Yusuf Ali Shaleh Atha. "The Use of The Task-Base Language Teaching (TBLT) Method to Improve Learning Outcomes of Arabic Language Skills." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (July 2024): 144–65. <https://doi.org/10.19105/ajpba.v5i2.14804>.

means of enhancing Arabic reading instruction and addressing the learning preferences of students in the digital era.

At the same time, contemporary educational literature has increasingly emphasized the importance of integrating local wisdom into learning processes. Local wisdom refers to the body of values, knowledge, traditions, cultural practices, and social experiences developed and transmitted within communities across generations. Previous studies suggest that the incorporation of local wisdom can promote contextualized learning, strengthen learners' cultural identity, and enhance the relevance of instructional content to their social environment.⁷ In language education, local wisdom is commonly integrated through folklore, local traditions, cultural heritage, social values, and other forms of indigenous knowledge that serve as meaningful learning resources.

Although research on Artificial Intelligence in language learning, local wisdom integration in education, and digital innovation in *Maharah Qira'ah* has grown substantially in recent years, these areas have largely developed independently. Some studies focus on the application of AI in language education, while others emphasize local wisdom integration or the development of digital media for Arabic language learning. As a result, limited attention has been given to understanding how Artificial Intelligence and local wisdom can be integrated simultaneously to support contextualized, adaptive, and learner-centered *Maharah Qira'ah* instruction in the digital age.

Furthermore, existing studies are predominantly concerned with the effectiveness of digital learning media, the development of culturally based instructional materials, or the implementation of specific technologies in Arabic language education. Systematic efforts to synthesize research findings on the integration of Artificial Intelligence and local wisdom in *Maharah Qira'ah* remain scarce. Such synthesis is essential for providing a comprehensive understanding of research trends, integration approaches, educational benefits, and implementation challenges within this emerging field.

Addressing this gap, the present study conducts a systematic literature review of the integration of Artificial Intelligence and local

⁷ Harfiandi, Hendra Kasmi, Endah Tri Priyatni, Azizatul Zahro, and Didi Yudha Pranata. "Developing a Hybrid Learning Model for Indonesian Language Instruction Integrating Local Wisdom: Evidence of Validity and Practicality." *Journal of Education and E-Learning Research* 13, no. 2 (May 2026): 179–89. <https://doi.org/10.20448/jeelr.v13i2.8680>.

wisdom in *Maharah Qira'ah* learning. Specifically, it aims to examine how AI has been utilized in Arabic reading instruction, identify forms of local wisdom integration within *Maharah Qira'ah* learning, and explore the opportunities and challenges arising from their integration. The findings are expected to contribute to the theoretical development of technology- and culture-based Arabic language education and to provide a foundation for designing *Maharah Qira'ah* learning models that are more adaptive, contextualized, and responsive to educational developments in the age of Artificial Intelligence.

Method

This study employed a Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize research related to the use of Artificial Intelligence (AI) and the integration of local wisdom in *Maharah Qira'ah* learning. The SLR approach was selected because it enables researchers to obtain a comprehensive, systematic, transparent, and replicable understanding of developments within a particular field of study. Furthermore, this method facilitates the identification of research trends, knowledge gaps, and future research opportunities through the synthesis of previously published empirical findings. The review process was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, which consists of four stages: identification, screening, eligibility assessment, and inclusion of relevant studies for in-depth analysis.⁸

Data Sources and Search Strategy

The data sources consisted of scholarly publications retrieved from several academic databases, including Google Scholar, Scopus, ERIC, and Crossref. These databases were selected because of their extensive coverage of literature in education, educational technology, artificial intelligence, and language learning. The literature search was conducted using combinations of keywords relevant to the research focus, including *Artificial Intelligence*, *AI-Assisted Learning*, *Maharah Qira'ah*, *Arabic Reading Skills*, *Local Wisdom*, *Culturally Responsive Learning*, *Digital Learning*, and *Web-Based Learning in Arabic*.

⁸ Page, Matthew J., Joanne E. McKenzie, Patrick M. Bossuyt, Isabelle Boutron, Tammy C. Hoffmann, Cynthia D. Mulrow, Larissa Shamseer, et al. "The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews." *BMJ*, March 29, 2021, n71. <https://doi.org/10.1136/bmj.n71>.

Education. These keywords were combined using Boolean operators (AND and OR) to identify studies directly related to the topic under investigation.

Table 1. Search Strategy and Keywords

Focus Area	Keywords
Artificial Intelligence	Artificial Intelligence, AI-Assisted Learning, Generative AI, Intelligent Tutoring Systems, Adaptive Learning
Arabic Language Learning	Arabic Language Learning, Arabic Education, Maharah Qira’ah, Arabic Reading Skills
Local Wisdom	Local Wisdom, Indigenous Knowledge, Culturally Responsive Learning, Culture-Based Learning
Digital Learning	Digital Learning, Web-Based Learning, E-Learning, Technology-Enhanced Learning

Inclusion and Exclusion Criteria

The selection process was conducted based on predefined inclusion and exclusion criteria to ensure the quality and relevance of the reviewed literature. The inclusion criteria were: (1) studies addressing Artificial Intelligence, digital learning, local wisdom, or *Maharah Qira’ah*; (2) articles published in peer-reviewed national or international journals; (3) studies published within the last ten years to reflect recent developments in the field; (4) articles available in full-text format; and (5) publications written in English or Indonesian. The exclusion criteria included studies unrelated to the research focus, editorials, opinion papers, non-academic conference reports, brief reports, and documents lacking sufficient methodological information for analysis.

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Studies addressing Artificial Intelligence, Maharah Qira’ah, digital learning, or local wisdom	Studies not relevant to the research focus
Peer-reviewed journal articles	Editorials, opinion papers, popular articles, or news reports
Articles written in English or Indonesian	Articles published in languages other than English or Indonesian

Full-text availability	Articles providing only abstracts
Published between 2019 and 2026	Articles published before 2019
Clear methodological information	Documents with insufficient methodological details

Article Screening Process

The identification stage involved collecting all studies retrieved from the selected databases. The retrieved records were subsequently subjected to an initial screening process, during which duplicate documents were removed and titles and abstracts were reviewed to determine their relevance to the research objectives. Studies that passed the screening stage were then examined through full-text reading to assess their eligibility and relevance. Only articles meeting all inclusion criteria were retained for the final synthesis and analysis. The selection procedure followed the PRISMA workflow, consisting of identification, screening, eligibility assessment, and inclusion.

Corpus of Reviewed Studies

Following the selection process, a total of 30 articles met the inclusion criteria and were included in the review. These studies were categorized into three major clusters: *Artificial Intelligence in Language Learning*, *Culture-Based Learning/Culturally Responsive Learning*, and *Maharah Qira’ah/Arabic Reading Skills*. The relatively balanced distribution of studies across these three clusters enabled a comprehensive synthesis of the relationships among Artificial Intelligence, culture-based learning, and the development of Arabic reading skills.

Table 3. Corpus of Reviewed Studies (2019-2026)

Author(s)	Article Title	Journal	DOI / Link
ARTIFICIAL INTELLIGENCE IN LANGUAGE LEARNING			
An (2025)	<i>Modeling Students' Perceptions of Artificial Intelligence Assisted Language Learning</i>	Computer Assisted Language Learning	https://doi.org/10.1080/09588221.2023.2246519
Lin (2025)	<i>Learner Perceptions of Artificial Intelligence-Generated Pedagogical Agents in Language</i>	International Journal of Human	https://doi.org/10.1080/10447318.2024.2359222

	<i>Learning Videos: Embodiment Effects on Technology Acceptance</i>	Computer Interaction	
Lopez-Gazpio (2025)	<i>Integrating Large Language Models into Accessible and Inclusive Education: Access Democratization and Individualized Learning Enhancement Supported by Generative Artificial Intelligence</i>	Information	https://doi.org/10.3390/info16060473
Jang (2025)	<i>Advancing Language Assessment for Teaching and Learning in the Era of the Artificial Intelligence Revolution: Promises and Challenges</i>	Language Testing	https://doi.org/10.1177/02655322251348685
Yang (2025)	<i>Artificial Intelligence versus Human Teacher Assistants and Language Learners' Progress in Learning and Retention of Complex Sentences</i>	Current Psychology	https://doi.org/10.1007/s12144-025-07488-6
Muñoz-Basols (2025)	<i>Opportunities for Artificial Intelligence (AI) in Language Teaching and Learning</i>	Technology Mediated Language Teaching from Social Justice to Artificial Intelligence	https://doi.org/10.21832/9781800419889-017
Law (2024)	<i>Application of Generative Artificial Intelligence (GenAI) in Language Teaching and Learning: A Scoping Literature Review</i>	Computers and Education Open	https://doi.org/10.1016/j.caeo.2024.100174

Ho (2024)	<i>Generative Artificial Intelligence and ChatGPT in Language Learning: EFL Students' Perceptions of Technology Acceptance</i>	Journal of University Teaching and Learning Practice	of https://doi.org/10.53761/fr1rkj58
Xu (2024)	<i>The Effectiveness of Artificial Intelligence on English Language Learning Achievement</i>	System	https://doi.org/10.1016/j.system.2024.103428
Jamshed (2024)	<i>Using Artificial Intelligence for English Language Learning: Saudi EFL Learners' Opinions, Attitudes and Challenges</i>	Journal of Education and E-Learning Research	of https://doi.org/10.20448/jeeelr.v11i1.5397
CULTURE-BASED LEARNING / CULTURALLY RESPONSIVE LEARNING			
Dost (2026)	<i>The Paradox of English-Medium-Instruction: How Disciplinary Culture and Medium-of-Instruction Shape Beliefs About Language Learning</i>	European Journal of Education	of https://doi.org/10.1111/ejed.70505
Rababah (2025)	<i>EFL Learning in the Digital Era: Navigating Language and Culture in Jordanian Universities</i>	Lecture Notes in Networks and Systems	https://doi.org/10.1007/978-3-031-71530-3_27
Koro (2025)	<i>Collaborative Curriculum Making at a Local Level: The Culture and Language Integrated Classrooms (CLiC) Project</i>	Language Learning Journal	https://doi.org/10.1080/09571736.2025.2475107
Liu (2025)	<i>Cultural Learning-Based Culture Adaptation of Language Models</i>	Proceedings of the Annual Meeting of the Association for	https://doi.org/10.18653/v1/2025.acl-long.156

		Computational Linguistics	
Harwati (2024)	<i>Mitigating Pedagogical Challenges Through Culture-Based Approach: Javanese Language Learning in Rural Yogyakarta, Indonesia</i>	Indonesian Journal of Applied Linguistics	of https://doi.org/10.17509/jal.v14i2.74894
Nechifor (2024)	<i>Unlocking ESP Potential: A Culture-Infused Approach to Mobile-Assisted Language Learning</i>	Analele Universitatii Ovidius Constanta Seria Filologie	https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85200950494&origin=inward
Kopečková (2022)	<i>Learning to Teach English in the Multilingual Classroom Utilizing the Framework of Reference for Pluralistic Approaches to Languages and Cultures</i>	Languages	https://doi.org/10.3390/languages7030168
Zhang (2025)	<i>Culture Matters for Hanzi Learning Enjoyment and Hanzi Recognition: Evidence From Arabic Learners of Chinese as a Second/Foreign Language</i>	International Journal of Applied Linguistics	of https://doi.org/10.1111/ijal.12750
Madi (2025)	<i>Between "Lecture" and "Exploration"! Learning Culture in Arabic as a Second Language</i>	Romanoarabica	https://doi.org/10.62229/roar_xxv/3
Abdelhadi (2020)	<i>Creative Interactions with Art Works: An</i>	Innovation in Language	https://doi.org/10.1080/1

	<i>Engaging Approach to Arabic Language-and-Culture Learning</i>	Learning and Teaching	and 7501229.2019.1579219
MAHARAH QIRA'AH / ARABIC READING SKILLS			
Ismail (2026)	<i>Relationship Between Flipped Learning and Creative Reading Skills Among Arabic Language Teachers in the United Arab Emirates</i>	Journal of Language Teaching and Research	of https://doi.org/10.17507/jltr.1702.07
Asadi (2024)	<i>Learning to Read in Arabic Diglossia: The Relation of Spoken and Standard Arabic Language in Kindergarten to Reading Skills in First Grade</i>	Literacy Research and Instruction	and https://doi.org/10.1080/19388071.2023.2217274
Facchin (2020)	<i>Whole-Part-Whole Reading Instruction in the Teaching and Learning of Arabic as a Foreign Language at Beginner Level</i>	Annali Di Ca Foscari Serie Orientale	https://doi.org/10.30687/ANNOR/2385-3042/2020/56/007
Hannah (2019)	<i>Flash Multimedia Application: An e-Learning Arabic Language for Mastering Fluency in Reading the Qur'an</i>	International Conference on Cyber and IT Service Management	on https://doi.org/10.1109/CITSM47753.2019.8965412
Alotaibi (2019)	<i>Design and Development of Mobile-Learning Model for Teaching Arabic Language Reading Skills to Non-Arab Speakers in Higher Education Institutions</i>	Opcion	https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85074762876&origin=inward

Siblini (2025)	<i>Developing Arabic Language Skills for Academic Purposes: An Approach to Critical Reading</i>	Romanoarabica	https://doi.org/10.62229/roar_xxv/8
Yunianti (2025)	<i>Enhancing Arabic Language Reading Skills Through Arabic News Anchors: A Comparative Study of Indonesian and Malaysian Students</i>	Pertanika Journal of Social Sciences and Humanities	https://doi.org/10.47836/pjssh.33.3.03
Hesham (2024)	<i>Exploring Phonological Awareness Skills in Arabic-Speaking Children with Borderline Intellectual Functioning and Poor Reading</i>	Egyptian Journal of Otolaryngology	https://doi.org/10.1186/s43163-024-00605-5
Syafei (2024)	<i>The Development of Student Reading Skills in Arabic for Reading Islamic Classical Books Using the Arabic Learning Model at Indonesian Islamic Boarding Schools</i>	Theory and Practice in Language Studies	https://doi.org/10.17507/tpls.1405.10
Syafei (2023)	<i>Enhancing Arabic Literacy Skills in Indonesian Boarding Schools: Empirical Evidence of an Innovative Learning Model for Reading Religious Texts</i>	European Journal for Philosophy of Religion	https://doi.org/10.24204/ejpr.2023.4236

Data Extraction

Data from the selected articles were systematically extracted to ensure the consistency and transparency of the literature synthesis process. The extraction procedure involved identifying several key aspects of each study, including bibliographic information, research focus, learning context, research design, instructional technologies or

learning approaches employed, integrated cultural dimensions, reading skill components examined, and the main findings of the study. The extracted information was subsequently organized into a data extraction matrix that served as the foundation for the coding and theme development processes. Through this procedure, each article could be analyzed comparatively, enabling the identification of patterns, trends, and relationships among studies relevant to the integration of Artificial Intelligence, culture-based learning, and the development of *Maharah Qira’ah*.

Data Analysis

The extracted data were analyzed using a thematic synthesis approach. This method enabled diverse research findings to be grouped into interconnected conceptual themes. Through a process of coding, categorization, and thematic synthesis, the study identified recurring patterns within the literature concerning the use of Artificial Intelligence and the integration of local wisdom in *Maharah Qira’ah* learning.

Results and Discussion

Literature Landscape

Following the search, screening, and selection procedures conducted through the Systematic Literature Review (SLR) approach, a total of 30 articles met the inclusion criteria and were included in the analysis. These studies were published between 2019 and 2026 and originated from various international journals addressing Artificial Intelligence in language learning, culture-based learning, and the development of Arabic reading skills. To facilitate the synthesis process, all studies were classified into three major clusters: *Artificial Intelligence in Language Learning*, *Culture-Based Learning/Culturally Responsive Learning*, and *Maharah Qira’ah/Arabic Reading Skills*.

Table 4. Distribution of Reviewed Studies by Corpus Cluster

Cluster	Number of Studies
Artificial Intelligence in Language Learning	10
Culture-Based Learning / Culturally Responsive Learning	10
Maharah Qira'ah / Arabic Reading Skills	10
Total	30

As shown in Table 4, the distribution of studies across the three clusters is relatively balanced. Ten studies examined the application of Artificial Intelligence in language learning, ten focused on culture-based and culturally responsive learning, and the remaining ten investigated the development of Arabic reading skills (*Maharah Qira'ah*). This balanced distribution provides a solid foundation for identifying conceptual relationships among Artificial Intelligence, cultural integration in education, and Arabic reading skill development.

An examination of publication years indicates that most studies were published between 2024 and 2026. This trend reflects the growing scholarly interest in the use of Artificial Intelligence in language education, particularly following the emergence of Generative Artificial Intelligence and Large Language Models, which have enabled more personalized and adaptive learning experiences. At the same time, research on culture-based learning has continued to develop consistently, especially in the areas of culturally responsive pedagogy, cultural integration within language curricula, and the reinforcement of learners' cultural identities through language education.

Within the Artificial Intelligence cluster, research primarily focused on personalized learning, generative artificial intelligence, large language models, intelligent tutoring systems, technology acceptance, and automated assessment. The reviewed studies consistently suggest that AI is increasingly perceived as a transformative technology capable of enhancing language learning through immediate feedback, adaptive instructional content, and greater learner engagement.

In contrast, studies within the culture-based learning cluster emphasized the importance of integrating culture into language education through approaches such as culture-based learning, culturally responsive teaching, multilingual education, and language-culture integration. These findings indicate that successful language learning depends not only on linguistic competence but also on learners' understanding of the cultural contexts in which language is embedded and used.

Meanwhile, the *Maharah Qira'ah* cluster was dominated by research on Arabic reading literacy, the use of digital technologies in reading instruction, mobile learning, multimedia learning, critical reading, and instructional models designed to enhance reading

proficiency. Collectively, these studies demonstrate that technological innovation and appropriate pedagogical strategies can significantly improve Arabic reading skills.

Artificial Intelligence for Personalized Language Learning

The synthesis of the reviewed literature indicates that Artificial Intelligence (AI) has become one of the most influential innovations in the transformation of language education over the past decade. The reviewed studies consistently demonstrate that AI is no longer viewed merely as a technological tool but rather as a pedagogical component capable of creating more personalized, adaptive, and learner-centered learning experiences.⁹ Developments in technologies such as Generative Artificial Intelligence, Large Language Models (LLMs), intelligent tutoring systems, and automated assessment have expanded opportunities for AI implementation across various aspects of language learning, ranging from instructional content delivery to learning evaluation.¹⁰

One of the most prominent findings in the literature is the ability of AI to support personalized learning. Unlike conventional instructional approaches that typically provide uniform learning experiences for all students, AI-based systems enable learning processes to be tailored to learners' needs, proficiency levels, learning progress, and individual characteristics.¹¹ Through continuous analysis of learning data, AI can identify learners' strengths and weaknesses and subsequently recommend appropriate learning materials, exercises, and activities. This

⁹ An, Xin, Ching Sing Chai, Yushun Li, Ying Zhou, and Bingyu Yang. "Modeling Students' Perceptions of Artificial Intelligence Assisted Language Learning." *Computer Assisted Language Learning* 38, nos. 5–6 (July 2025): 987–1008. <https://doi.org/10.1080/09588221.2023.2246519>.

¹⁰ Law, Locky. "Application of Generative Artificial Intelligence (GenAI) in Language Teaching and Learning: A Scoping Literature Review." *Computers and Education Open* 6 (June 2024): 100174. <https://doi.org/10.1016/j.caeo.2024.100174>.

¹¹ Lin, Yupeng, and Zhonggen Yu. "Learner Perceptions of Artificial Intelligence-Generated Pedagogical Agents in Language Learning Videos: Embodiment Effects on Technology Acceptance." *International Journal of Human-Computer Interaction* 41, no. 2 (January 2025): 1606–27. <https://doi.org/10.1080/10447318.2024.2359222>.

adaptive capability positions AI as one of the most promising technologies for facilitating learner-centered language education.¹²

Beyond personalization, the literature also highlights the role of AI in expanding learners' access to educational resources. The emergence of Large Language Models and various Generative AI applications enables learners to obtain explanations, language examples, practice activities, and feedback instantly without relying entirely on teacher availability.¹³ In language learning contexts, these technologies can automatically generate diverse instructional materials, including reading passages, practice exercises, dialogues, summaries, and grammar explanations. Such capabilities provide learners with greater opportunities for self-directed and flexible learning according to their individual needs and learning pace.

Another recurring theme in the literature is the contribution of AI to learner engagement. Several studies report that responsive and real-time interactions enhance students' involvement in learning activities.¹⁴ As virtual tutors, AI systems can provide immediate responses to learners' questions and errors, creating a more interactive learning environment than traditional instructional settings, where personalized feedback is often constrained by teachers' time and workload.¹⁵

AI has also demonstrated significant contributions to assessment practices. AI-based assessment systems enable faster, more consistent, and continuous evaluation processes. Studies indicate that AI can provide detailed analyses of learner performance, including error

¹² Jamshed, Mohammad, Iftikhar Alam, Sultan al Sultan, and Sameena Banu. "Using Artificial Intelligence for English Language Learning: Saudi EFL Learners' Opinions, Attitudes and Challenges." *Journal of Education and E-Learning Research* 11, no. 1 (February 2024): 135–41. <https://doi.org/10.20448/jeelr.v11i1.5397>.

¹³ Lopez-Gazpio, Inigo. "Integrating Large Language Models into Accessible and Inclusive Education: Access Democratization and Individualized Learning Enhancement Supported by Generative Artificial Intelligence." *Information* 16, no. 6 (June 2025): 473. <https://doi.org/10.3390/info16060473>.

¹⁴ Jang, Eunice Eunhee, and Yasuyo Sawaki. "Advancing Language Assessment for Teaching and Learning in the Era of the Artificial Intelligence (AI) Revolution: Promises and Challenges." *Language Testing* 42, no. 4 (October 2025): 361–68. <https://doi.org/10.1177/02655322251348685>.

¹⁵ Vo, Thi Kim Anh, and Huong Nguyen. "Generative Artificial Intelligence and ChatGPT in Language Learning: EFL Students' Perceptions of Technology Acceptance." *Journal of University Teaching and Learning Practice* 21, no. 06 (April 2024). <https://doi.org/10.53761/fr1rkj58>.

identification, progress tracking, and recommendations for improvement.¹⁶ Consequently, assessment is no longer limited to measuring learning outcomes but also functions as an integral component of the learning process through continuous feedback provision.

Despite these benefits, the reviewed literature also highlights several challenges associated with the implementation of AI in language learning. Concerns include the accuracy of AI-generated information, learners’ potential overreliance on technology, and ethical issues related to data privacy and algorithmic transparency.¹⁷ Moreover, successful implementation depends heavily on the digital literacy of both learners and educators. Therefore, most studies emphasize that AI should not be viewed as a replacement for teachers but rather as a pedagogical partner that enhances teaching and learning effectiveness.¹⁸

Overall, the synthesis suggests that the primary contribution of Artificial Intelligence to language education lies in its capacity to create personalized, adaptive, and responsive learning environments. Its ability to provide immediate feedback, generate instructional content automatically, support continuous assessment, and enhance learner engagement demonstrates its transformative potential for language education. These findings provide an important foundation for exploring how AI-driven personalization can be integrated with culture-based learning approaches and the development of *Maharah Qira’ah*, as discussed in the following sections.

Culture-Based and Culturally Responsive Language Learning

The synthesis of the reviewed literature demonstrates that culture constitutes a fundamental element of language learning. Numerous studies consistently emphasize that successful language learning

¹⁶ Yang, Mei-lan. “Artificial Intelligence versus Human Teacher Assistants and Language Learners’ Progress in Learning and Retention of Complex Sentences.” *Current Psychology* 44, no. 7 (April 2025): 6292–304. <https://doi.org/10.1007/s12144-025-07488-6>.

¹⁷ Muñoz-Basols, Javier, and Mara Fuertes Gutiérrez. “13 Opportunities for Artificial Intelligence (AI) in Language Teaching and Learning.” In *Technology-Mediated Language Teaching*, 297–315. Multilingual Matters, 2025. <https://doi.org/10.21832/9781800419889-017>.

¹⁸ Xu, Tianyuan, and Huang Wang. “The Effectiveness of Artificial Intelligence on English Language Learning Achievement.” *System* 125 (October 2024): 103428. <https://doi.org/10.1016/j.system.2024.103428>.

depends not only on linguistic competence but also on learners' understanding of the social and cultural contexts in which language is used. Consequently, culture is no longer regarded as a supplementary component of language instruction but as an integral element that shapes meaning, function, and language use in real-life situations.¹⁹

The reviewed studies indicate growing interest in culture-based learning and culturally responsive learning across various language education contexts. These approaches are founded on the premise that learning becomes more meaningful when connected to learners' cultural backgrounds, values, social experiences, and identities.²⁰ Through such approaches, language learning extends beyond mastering linguistic structures to developing an understanding of the cultural perspectives embedded within the target language. As a result, learners not only acquire language skills but also gain insight into how language operates within specific cultural settings.

One of the most significant findings concerns the importance of integrating culture into instructional materials and learning activities. Studies reveal that culturally enriched learning materials can enhance learner motivation, engagement, and comprehension. When learners perceive meaningful connections between instructional content and their social and cultural realities, learning becomes more relevant and meaningful.²¹ Conversely, instructional materials detached from cultural contexts are often perceived as abstract and difficult to relate to learners' everyday experiences.

¹⁹ Liu, Chen Cecilia, Anna Korhonen, and Iryna Gurevych. "Cultural Learning-Based Culture Adaptation of Language Models." *Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)* (Stroudsburg, PA, USA), 2025, 3114–34. <https://doi.org/10.18653/v1/2025.acl-long.156>.

²⁰ Koro, Ruth, and Lesley Hagger-Vaughan. "Collaborative Curriculum Making at a Local Level: The Culture and Language Integrated Classrooms (CLiC) Project – Integrating Linguistic and Cultural Learning in the Day-to-Day Practices of Language Teachers." *The Language Learning Journal*, March 17, 2025, 1–19. <https://doi.org/10.1080/09571736.2025.2475107>.

²¹ Kopečková, Romana, and Gregory J. Poarch. "Learning to Teach English in the Multilingual Classroom Utilizing the Framework of Reference for Pluralistic Approaches to Languages and Cultures." *Languages* 7, no. 3 (July 2022): 168. <https://doi.org/10.3390/languages7030168>.

The literature further suggests that culture-based learning contributes to strengthening learners' cultural identities. In the context of globalization and digitalization, language education serves not only as a means of developing communicative competence but also as a medium for preserving and reinforcing cultural identity. By incorporating local values, traditions, historical narratives, and social practices into instruction, learners are provided opportunities to understand and appreciate their cultural heritage.²² These findings indicate that language learning can function as a space where linguistic development and cultural identity formation interact constructively.

Additionally, several studies emphasize the importance of language-culture integration. Language and culture are viewed as inseparable because linguistic meaning is inherently shaped by cultural contexts.²³ Therefore, cultural understanding is considered essential for the development of comprehensive communicative competence. Learners who possess cultural awareness are generally better equipped to interpret meanings, understand language use in different situations, and avoid misunderstandings arising from cultural differences.

Particularly relevant findings emerge from studies on Arabic and foreign language learning. These studies demonstrate that language acquisition becomes more effective when instruction incorporates an understanding of the culture associated with the target language.²⁴ In Arabic language education, for example, knowledge of Arab cultural values, traditions, and social practices supports deeper comprehension of texts. This indicates that linguistic competence and cultural competence

²² MADI, AMR. "Between 'Lecture' and 'Exploration'! Learning Culture in Arabic as a Second Language." *Romano-Arabica* 25, no. 2025 (November 2025): 61–90. https://doi.org/10.62229/roar_xxv/3.

²³ Abdelhadi, Reem, Luma Hameed, Fatima Khaled, and Jim Anderson. "Creative Interactions with Art Works: An Engaging Approach to Arabic Language-and-Culture Learning." *Innovation in Language Learning and Teaching* 14, no. 3 (May 2020): 273–89. <https://doi.org/10.1080/17501229.2019.1579219>.

²⁴ Zhang, Haiwei, and Shucheng Yang. "Culture Matters for Hanzi Learning Enjoyment and Hanzi Recognition: Evidence From Arabic Learners of Chinese as a Second/Foreign Language." *International Journal of Applied Linguistics* 35, no. 4 (November 2025): 2049–62. <https://doi.org/10.1111/ijal.12750>.

develop in a mutually reinforcing manner throughout the language learning process.²⁵

The advancement of digital technology has also created new opportunities for implementing culture-based learning. Studies suggest that digital platforms, mobile learning applications, and interactive learning media facilitate broader and more flexible cultural integration. Technology enables learners to access diverse cultural resources, thereby extending learning experiences beyond classroom boundaries.²⁶ Consequently, cultural integration in language learning can be implemented in more dynamic and contextualized ways that align with contemporary educational developments.²⁷

Overall, the synthesis highlights the strategic role of culture in language education. Cultural integration not only enhances instructional effectiveness but also strengthens the relevance, meaningfulness, and contextual connection of learning materials to learners' lives. These findings suggest that future language education should position culture as a pedagogical foundation that bridges linguistic, social, and identity-related dimensions of learning. Within the context of the present study, these insights provide an important basis for examining how cultural values and local wisdom can be integrated with Artificial Intelligence to support the development of *Maharah Qira'ah* in more contextualized and meaningful ways.

Digital Innovation in Maharah Qira'ah Development

The synthesis of the literature indicates that digital innovation has become a major driving force in the transformation of *Maharah Qira'ah* instruction across educational levels. Advances in information and communication technologies have expanded access to learning resources, diversified instructional media, and introduced innovative

²⁵ Harwati, Lusiana Neti, and Mala Rajo Sathian. "Mitigating Pedagogical Challenges through Culture-Based Approach: Javanese Language Learning in Rural Yogyakarta, Indonesia." *Indonesian Journal of Applied Linguistics* 14, no. 2 (September 2024): 262–72. <https://doi.org/10.17509/ijal.v14i2.74894>.

²⁶ Rababah, Luqman M. *EFL Learning in the Digital Era: Navigating Language and Culture in Jordanian Universities*. 2025. https://doi.org/10.1007/978-3-031-71530-3_27.

²⁷ Dost, Guliz Turgut. "The Paradox of English-Medium-Instruction: How Disciplinary Culture and Medium-Of-Instruction Shape Beliefs About Language Learning." *European Journal of Education* 61, no. 1 (March 2026). <https://doi.org/10.1111/ejed.70505>.

approaches that support the development of Arabic reading skills more effectively.²⁸ The reviewed studies consistently demonstrate that integrating digital technologies into *Maharah Qira'ah* instruction not only enhances learning quality but also creates more flexible, interactive, and learner-centered learning experiences suited to the characteristics of digital-age learners.²⁹

One of the most prominent findings is the growing utilization of mobile learning in Arabic reading instruction. Studies indicate that mobile devices allow learners to access instructional materials anytime and anywhere, overcoming the limitations of formal classroom settings. This flexibility provides opportunities for continuous and independent reading practice. In addition to improving accessibility, mobile learning facilitates the presentation of content through engaging formats, thereby enhancing learner motivation and participation.³⁰

Another notable trend is the increasing adoption of multimedia learning. The integration of text, images, audio, video, and animation makes reading instruction more engaging and comprehensible.³¹ Research suggests that multimedia-based instruction assists learners in understanding vocabulary, grammatical structures, and textual content more effectively than text-only approaches. Visual and auditory elements also help reduce the difficulties frequently encountered by

²⁸ Syafei, Isop, Eman Suleman, and Rohanda Rohanda. "The Development of Student Reading Skills in Arabic for Reading Islamic Classical Books Using the Arabic Learning Model at Indonesian Islamic Boarding Schools." *Theory and Practice in Language Studies* 14, no. 5 (May 2024): 1381–92. <https://doi.org/10.17507/tpls.1405.10>.

²⁹ Hannah, Neng, Husnul Qodim, Ramdani Wahyu Sururie, and Robbi Rahim. "Flash Multimedia Application: An E Learning Arabic Language for Mastering Fluency in Reading the Qur'an." *2019 7th International Conference on Cyber and IT Service Management (CITSM)*, November 2019, 1–4. <https://doi.org/10.1109/CITSM47753.2019.8965412>.

³⁰ Ismail, Zawawi bin, Saleh Saeed al Naeem, Mohammad Ahsanuddin, and Fathul Hakim Zawawi. "Relationship Between Flipped Learning and Creative Reading Skills Among Arabic Language Teachers in the United Arab Emirates." *Journal of Language Teaching and Research* 17, no. 2 (March 2026): 440–51. <https://doi.org/10.17507/jltr.1702.07>.

³¹ Facchin, Andrea. "Whole-Part-Whole Reading Instruction in the Teaching and Learning of Arabic as a Foreign Language at Beginner Level." *Annali Di Ca' Foscari. Serie Orientale*, no. 56 (June 2020). <https://doi.org/10.30687/AnnOr/2385-3042/2020/56/007>.

learners when interacting with Arabic texts, particularly among non-native speakers.³²

The literature further demonstrates that technology-enhanced instructional models contribute positively to reading skill development. One widely discussed approach is flipped learning, in which instructional content is delivered outside the classroom through digital media, allowing face-to-face sessions to focus on discussion, practice, and problem-solving. Findings indicate that this approach increases learner engagement while promoting more reflective and creative reading practices.³³

In the context of reading development, several studies emphasize that *Maharah Qira'ah* extends beyond the ability to recognize symbols and comprehend explicit information. It also encompasses critical, analytical, and interpretive thinking skills. Consequently, many of the instructional innovations identified in the literature focus not only on improving reading fluency but also on fostering critical reading abilities. Learners are encouraged to analyze texts, evaluate arguments, connect information to broader contexts, and develop deeper interpretations of reading materials.³⁴

Another recurring finding concerns the importance of continuous Arabic reading literacy development. Studies consistently suggest that reading proficiency serves as a foundation for the development of other language skills, including writing, speaking, and the comprehension of academic and religious texts. Therefore, instructional models proposed in the reviewed studies aim to strengthen reading literacy through systematic and learner-oriented approaches. In Islamic educational settings, reading proficiency is particularly significant because it directly

³² Hesham, Sara, Omayma Afsah, and Hemmat Baz. "Exploring Phonological Awareness Skills in Arabic-Speaking Children with Borderline Intellectual Functioning and Poor Reading." *The Egyptian Journal of Otolaryngology* 40, no. 1 (May 2024): 58. <https://doi.org/10.1186/s43163-024-00605-5>.

³³ Fitria Sari Yudianti, A. Syahid Robbani, Khafidhoh, Siti Salamah, and Mohamad Nor Amin Samsun Baharun. "Enhancing Arabic Language Reading Skills Through Arabic News Anchors: A Comparative Study of Indonesian and Malaysian Students." *Pertanika Journal of Social Sciences and Humanities* 33, no. 3 (June 2025). <https://doi.org/10.47836/pjssh.33.3.03>.

³⁴ SIBLINI, RANA. "Developing Arabic Language Skills for Academic Purposes: An Approach to Critical Reading." *Romano-Arabica* 25, no. 2025 (November 2025): 165–77. https://doi.org/10.62229/roar_xxv/8.

supports access to classical Islamic scholarship, much of which is written in Arabic.

Furthermore, several studies indicate that successful *Maharah Qira'ah* development depends on learners' mastery of foundational reading skills, including phonological awareness, vocabulary knowledge, and understanding the relationship between spoken and written language. These findings suggest that digital innovations in reading instruction should continue to address these fundamental linguistic competencies, which serve as prerequisites for more advanced reading development.³⁵

Overall, the synthesis demonstrates that digital innovation has created new opportunities for enhancing *Maharah Qira'ah* through expanded access to learning resources, more interactive learning experiences, and innovative instructional models that support comprehensive reading development. The use of mobile learning, multimedia learning, flipped learning, and other digital technologies has been shown to improve reading literacy, reading comprehension, and critical thinking skills. These findings indicate that digital transformation has not only altered instructional media but has also reshaped the paradigm of Arabic reading instruction. This development provides a valuable foundation for exploring how the personalization capabilities of Artificial Intelligence can be integrated with digital innovation and culture-based content to support more adaptive and contextualized *Maharah Qira'ah* learning.

Toward AI-Assisted Culture-Based *Maharah Qira'ah* Learning

The synthesis of the reviewed literature indicates that research on Artificial Intelligence, culture-based learning, and the development of *Maharah Qira'ah* has generally evolved along separate trajectories, despite sharing strong conceptual connections. Studies in Artificial Intelligence primarily focus on the capacity of technology to create more personalized, adaptive, and responsive learning experiences. In contrast, research on culture-based learning emphasizes the importance of contextualizing instruction through the integration of cultural values,

³⁵ Asadi, Ibrahim Abdalla, and Khaloob Kavar. "Learning to Read in Arabic Diglossia: The Relation of Spoken and Standard Arabic Language in Kindergarten to Reading Skills in First Grade." *Literacy Research and Instruction* 63, no. 4 (October 2024): 360–76. <https://doi.org/10.1080/19388071.2023.2217274>.

local identities, and learners' social experiences. Meanwhile, studies on *Maharah Qira'ah* increasingly highlight the use of digital technologies and innovative pedagogical approaches to enhance reading literacy and learner engagement. Although these domains have developed independently, the findings suggest considerable potential for their integration within a more comprehensive instructional framework.

The synthesis further reveals that one of the primary strengths of Artificial Intelligence lies in its ability to personalize learning.³⁶ AI-based systems can analyze learners' needs, abilities, and progress individually, and subsequently adapt instructional materials, learning activities, and feedback accordingly. In the context of *Maharah Qira'ah*, this capability creates opportunities to provide reading texts that correspond to learners' proficiency levels, making instruction more effective and reducing reliance on uniform materials for all students. AI also enables adaptive reading exercises in which the complexity of texts can be adjusted dynamically according to learners' progress.³⁷

At the same time, findings from the culture-based learning literature demonstrate that the effectiveness of language instruction is strongly influenced by the cultural relevance of learning materials. Content that reflects learners' social and cultural experiences tends to be easier to understand, more engaging, and more motivating.³⁸ These findings imply that AI-driven personalization should not be limited to adapting instructional difficulty but should also incorporate learners' cultural backgrounds. In this way, AI functions not merely as a

³⁶ Sayed, Wafaa S., Ahmed M. Noeman, Abdelrahman Abdellatif, Moemen Abdelrazek, Mostafa G. Badawy, Ahmed Hamed, and Samah El-Tantawy. "AI-Based Adaptive Personalized Content Presentation and Exercises Navigation for an Effective and Engaging E-Learning Platform." *Multimedia Tools and Applications* 82, no. 3 (January 2023): 3303–33. <https://doi.org/10.1007/s11042-022-13076-8>.

³⁷ Humairoh, Sitti Wardatul, Nurul Hadi, and Umi Hanifah. "The AI Revolution in Arabic Language Learning: An Analysis of ChatGPT's Role in Autonomous Learning." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 7, no. 1 (January 2026): 1–19. <https://doi.org/10.19105/ajpba.v7i1.22479>.

³⁸ Nasution, Sahkholid, Harun Al-Rasyid, Putri Wulandari, Zikrani Khalila, and Baharuddin Pasaribu. "An Analysis of Qira'ah Textbooks for Islamic Senior Highschool: A Religious Moderation Perspective." *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 10, no. 2 (December 2023): 203–16. <https://doi.org/10.15408/a.v10i2.34132>.

technology that adjusts content complexity but as a system capable of delivering more contextualized and meaningful learning experiences.

Within *Maharah Qira'ah* instruction, cultural integration extends beyond the inclusion of cultural information in reading texts. Culture can serve as a primary source for the development of authentic and meaningful reading materials. Various forms of local wisdom, community traditions, folklore, social values, local history, and cultural practices can be transformed into reading resources that support reading skill development while simultaneously strengthening learners' cultural identities. Such an approach is consistent with the principles of culturally responsive learning, which recognize learners' experiences and backgrounds as essential components of the educational process.³⁹

Based on these findings, this study proposes a conceptual framework that integrates Artificial Intelligence, culture-based learning, and *Maharah Qira'ah* as three complementary components. Artificial Intelligence functions as a mechanism for personalization and adaptive instruction. Culture-based learning provides contextual and meaningful content that enriches learning experiences. Meanwhile, *Maharah Qira'ah* represents the primary educational objective, focusing on the development of reading literacy, reading comprehension, and critical reading skills.

Table 5. Conceptual Framework of AI-Assisted Culture-Based Maharah Qira'ah Learning

Component	Main Contribution
Artificial Intelligence	Personalized learning, adaptive instruction, automated feedback, learning analytics
Culture-Based Learning	Cultural relevance, contextual learning, local wisdom integration, identity reinforcement
Maharah Qira'ah	Reading literacy, reading comprehension, critical reading, textual interpretation
Integrated Outcome	Adaptive, contextual, and culturally responsive Arabic reading learning

As illustrated in Table 5, the integration of these three components has the potential to generate a more adaptive,

³⁹ Lewicka Magdalena, and Waszau Anna. "Analysis of Textbooks for Teaching Arabic as a Foreign Language in Terms of the Cultural Curriculum." *Universal Journal of Educational Research* 5, no. 1 (2017): 36–44.

contextualized, and learner-responsive model of *Maharah Qira'ah* instruction. Artificial Intelligence enables learners to access materials aligned with their proficiency levels, while cultural integration ensures that these materials remain relevant to their social and cultural environments. Simultaneously, reading development extends beyond literal comprehension to include interpretation, contextual understanding, and critical reflection on textual content.

These findings suggest that the future of *Maharah Qira'ah* instruction will depend not only on technological advancement but also on the ability to connect technology with learners' cultural contexts. From this perspective, Artificial Intelligence should not be viewed as the ultimate goal of education but rather as a means of fostering more human-centered, contextualized, and meaningful learning experiences. Consequently, the development of AI-assisted *Maharah Qira'ah* models that incorporate cultural values and local wisdom represents a promising direction for addressing the challenges of Arabic language education in the era of digital transformation.

Conclusion

This study aimed to synthesize the literature on the use of Artificial Intelligence, culture-based learning, and the development of *Maharah Qira'ah* through a Systematic Literature Review of 30 articles published between 2019 and 2026. The findings indicate that Artificial Intelligence has made significant contributions to the transformation of language education through personalized learning, adaptive instructional content, automated feedback, and support for self-directed learning. At the same time, culture-based learning has proven effective in creating learning experiences that are more contextualized, meaningful, and relevant to learners' sociocultural backgrounds. Furthermore, various digital innovations in *Maharah Qira'ah* instruction demonstrate considerable potential for improving reading literacy, reading comprehension, and critical reading skills.

The synthesis further reveals that these three domains are conceptually interconnected and mutually reinforcing. Artificial Intelligence provides mechanisms for personalization and adaptive instruction, culture-based learning offers authentic contexts and culturally relevant content, and *Maharah Qira'ah* represents the core competency developed through the learning process. Based on these findings, this study proposes the conceptual framework of *AI-Assisted*

Culture-Based Maharah Qira’ah Learning as a promising direction for Arabic reading instruction that integrates Artificial Intelligence with cultural values and local wisdom. Within this framework, Artificial Intelligence is positioned not merely as a technological tool but as a means of creating more adaptive, contextualized, and learner-centered educational experiences.

The primary contribution of this study lies in bridging three domains that have largely been examined independently: Artificial Intelligence, culture-based learning, and *Maharah Qira’ah*. Through a systematic synthesis of the literature, the study demonstrates that integrating these domains has the potential to generate Arabic language learning models that are more responsive to contemporary educational needs in the era of digital transformation. Practically, the findings may serve as a reference for educators, curriculum developers, and educational technology designers in developing Arabic reading materials and learning environments that leverage the adaptive capabilities of Artificial Intelligence while remaining grounded in cultural values and local wisdom. Consequently, future developments in *Maharah Qira’ah* should focus not only on improving reading proficiency but also on strengthening cultural identity and fostering more meaningful learning experiences for students.

REFERENCES

- Abdelhadi, Reem, Luma Hameed, Fatima Khaled, and Jim Anderson. "Creative Interactions with Art Works: An Engaging Approach to Arabic Language-and-Culture Learning." *Innovation in Language Learning and Teaching* 14, no. 3 (2020): 273–89. <https://doi.org/10.1080/17501229.2019.1579219>.
- Al-Abdullatif, Ahlam Mohammed, and Merfat Ayesh Alsubaie. "Using Digital Learning Platforms for Teaching Arabic Literacy: A Post-Pandemic Mobile Learning Scenario in Saudi Arabia." *Sustainability* 14, no. 19 (2022): 11868. <https://doi.org/10.3390/su141911868>.
- An, Xin, Ching Sing Chai, Yushun Li, Ying Zhou, and Bingyu Yang. "Modeling Students' Perceptions of Artificial Intelligence Assisted Language Learning." *Computer Assisted Language Learning* 38, nos. 5–6 (2025): 987–1008. <https://doi.org/10.1080/09588221.2023.2246519>.
- Asadi, Ibrahim Abdalla, and Khaloob Kavar. "Learning to Read in Arabic Diglossia: The Relation of Spoken and Standard Arabic Language in Kindergarten to Reading Skills in First Grade." *Literacy Research and Instruction* 63, no. 4 (2024): 360–76. <https://doi.org/10.1080/19388071.2023.2217274>.
- Dost, Guliz Turgut. "The Paradox of English-Medium-Instruction: How Disciplinary Culture and Medium-of-Instruction Shape Beliefs About Language Learning." *European Journal of Education* 61, no. 1 (2026). <https://doi.org/10.1111/ejed.70505>.
- Facchin, Andrea. "Whole-Part-Whole Reading Instruction in the Teaching and Learning of Arabic as a Foreign Language at Beginner Level." *Annali di Ca' Foscari. Serie Orientale* 56 (2020). <https://doi.org/10.30687/AnnOr/2385-3042/2020/56/007>.
- Hannah, Neng, Husnul Qodim, Ramdani Wahyu Sururie, and Robbi Rahim. "Flash Multimedia Application: An E-Learning Arabic Language for Mastering Fluency in Reading the Qur'an." In *2019 7th International Conference on Cyber and IT Service Management (CITSM)*, 1–4. 2019. <https://doi.org/10.1109/CITSM47753.2019.8965412>.
- Harfiandi, Hendra Kasmi, Endah Tri Priyatni, Azizatul Zahro, and Didi Yudha Pranata. "Developing a Hybrid Learning Model for Indonesian Language Instruction Integrating Local Wisdom: Evidence of Validity and Practicality." *Journal of Education and*

- E-Learning Research* 13, no. 2 (2026): 179–89.
<https://doi.org/10.20448/jeelr.v13i2.8680>.
- Harwati, Lusiana Neti, and Mala Rajo Sathian. “Mitigating Pedagogical Challenges through Culture-Based Approach: Javanese Language Learning in Rural Yogyakarta, Indonesia.” *Indonesian Journal of Applied Linguistics* 14, no. 2 (2024): 262–72.
<https://doi.org/10.17509/ijal.v14i2.74894>.
- Hesham, Sara, Omayma Afsah, and Hemmat Baz. “Exploring Phonological Awareness Skills in Arabic-Speaking Children with Borderline Intellectual Functioning and Poor Reading.” *The Egyptian Journal of Otolaryngology* 40, no. 1 (2024): 58.
<https://doi.org/10.1186/s43163-024-00605-5>.
- Ho, A. [Vo, Thi Kim Anh, and Huong Nguyen]. “Generative Artificial Intelligence and ChatGPT in Language Learning: EFL Students’ Perceptions of Technology Acceptance.” *Journal of University Teaching and Learning Practice* 21, no. 6 (2024).
<https://doi.org/10.53761/frlrkj58>.
- Humairoh, Sitti Wardatul, Nurul Hadi, and Umi Hanifah. “The AI Revolution in Arabic Language Learning: An Analysis of ChatGPT’s Role in Autonomous Learning.” *Alibbaa’: Jurnal Pendidikan Bahasa Arab* 7, no. 1 (2026): 1–19.
<https://doi.org/10.19105/ajpba.v7i1.22479>.
- Ismail, Zawawi bin, Saleh Saeed al Naeem, Mohammad Ahsanuddin, and Fathul Hakim Zawawi. “Relationship Between Flipped Learning and Creative Reading Skills Among Arabic Language Teachers in the United Arab Emirates.” *Journal of Language Teaching and Research* 17, no. 2 (2026): 440–51.
<https://doi.org/10.17507/jltr.1702.07>.
- Jamshed, Mohammad, Iftikhar Alam, Sultan al Sultan, and Sameena Banu. “Using Artificial Intelligence for English Language Learning: Saudi EFL Learners’ Opinions, Attitudes and Challenges.” *Journal of Education and E-Learning Research* 11, no. 1 (2024): 135–41. <https://doi.org/10.20448/jeelr.v11i1.5397>.
- Jang, Eunice Eunhee, and Yasuyo Sawaki. “Advancing Language Assessment for Teaching and Learning in the Era of the Artificial Intelligence Revolution: Promises and Challenges.” *Language Testing* 42, no. 4 (2025): 361–68.
<https://doi.org/10.1177/02655322251348685>.
- Kopečková, Romana, and Gregory J. Poarch. “Learning to Teach English in the Multilingual Classroom Utilizing the Framework of

- Reference for Pluralistic Approaches to Languages and Cultures.” *Languages* 7, no. 3 (2022): 168. <https://doi.org/10.3390/languages7030168>.
- Koro, Ruth, and Lesley Hagger-Vaughan. “Collaborative Curriculum Making at a Local Level: The Culture and Language Integrated Classrooms (CLiC) Project.” *The Language Learning Journal* (2025): 1–19. <https://doi.org/10.1080/09571736.2025.2475107>.
- Kosim, Nanang, Ade Arip Ardiansyah, Hilda Saripatul Hikmah, and Yusuf Ali Shaleh Atha. “The Use of the Task-Base Language Teaching (TBLT) Method to Improve Learning Outcomes of Arabic Language Skills.” *Alibbaa’: Jurnal Pendidikan Bahasa Arab* 5, no. 2 (2024): 144–65. <https://doi.org/10.19105/ajpba.v5i2.14804>.
- Kundu, Arnab, and Tripti Bej. “AI in School EFL Learning: A Systematic Review of Impact Pathways for Engagement, Achievement, and Satisfaction.” *Journal of Language and Education* 11, no. 4 (2025): 131–48. <https://doi.org/10.17323/jle.2025.22083>.
- Law, Locky. “Application of Generative Artificial Intelligence (GenAI) in Language Teaching and Learning: A Scoping Literature Review.” *Computers and Education Open* 6 (2024): 100174. <https://doi.org/10.1016/j.caeo.2024.100174>.
- Lewicka, Magdalena, and Anna Waszau. “Analysis of Textbooks for Teaching Arabic as a Foreign Language in Terms of the Cultural Curriculum.” *Universal Journal of Educational Research* 5, no. 1 (2017): 36–44.
- Lin, Yupeng, and Zhonggen Yu. “Learner Perceptions of Artificial Intelligence-Generated Pedagogical Agents in Language Learning Videos: Embodiment Effects on Technology Acceptance.” *International Journal of Human–Computer Interaction* 41, no. 2 (2025): 1606–27. <https://doi.org/10.1080/10447318.2024.2359222>.
- Liu, Chen Cecilia, Anna Korhonen, and Iryna Gurevych. “Cultural Learning-Based Culture Adaptation of Language Models.” *Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics* (2025): 3114–34. <https://doi.org/10.18653/v1/2025.acl-long.156>.
- Lopez-Gazpio, Inigo. “Integrating Large Language Models into Accessible and Inclusive Education: Access Democratization and Individualized Learning Enhancement Supported by Generative

- Artificial Intelligence.” *Information* 16, no. 6 (2025): 473.
<https://doi.org/10.3390/info16060473>.
- Madi, Amr. “Between ‘Lecture’ and ‘Exploration’! Learning Culture in Arabic as a Second Language.” *Romano-Arabica* 25 (2025): 61–90. https://doi.org/10.62229/roar_xxv/3.
- Mansour-Adwan, Jasmeen, Yasmin Shalhoub-Awwad, Ravit Cohen-Mimran, and Asaid Khateb. “Reading in Kindergarten Arabic-Speaking Children with Low Linguistic Skills: A Longitudinal Study.” *Applied Psycholinguistics* 44, no. 2 (2023): 265–91. <https://doi.org/10.1017/S014271642300019X>.
- Muñoz-Basols, Javier, and Mara Fuertes Gutiérrez. “Opportunities for Artificial Intelligence (AI) in Language Teaching and Learning.” In *Technology-Mediated Language Teaching*, 297–315. Bristol: Multilingual Matters, 2025. <https://doi.org/10.21832/9781800419889-017>.
- Nasution, Sahkholid, Harun Al-Rasyid, Putri Wulandari, Zikrani Khalila, and Baharuddin Pasaribu. “An Analysis of Qira’ah Textbooks for Islamic Senior High School: A Religious Moderation Perspective.” *Arabiyat* 10, no. 2 (2023): 203–16. <https://doi.org/10.15408/a.v10i2.34132>.
- Page, Matthew J., Joanne E. McKenzie, Patrick M. Bossuyt, Isabelle Boutron, Tammy C. Hoffmann, Cynthia D. Mulrow, Larissa Shamseer, et al. “The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews.” *BMJ* 372 (2021): n71. <https://doi.org/10.1136/bmj.n71>.
- Rababah, Luqman M. *EFL Learning in the Digital Era: Navigating Language and Culture in Jordanian Universities*. 2025. https://doi.org/10.1007/978-3-031-71530-3_27.
- Sayed, Wafaa S., Ahmed M. Noeman, Abdelrahman Abdellatif, Moemen Abdelrazek, Mostafa G. Badawy, Ahmed Hamed, and Samah El-Tantawy. “AI-Based Adaptive Personalized Content Presentation and Exercises Navigation for an Effective and Engaging E-Learning Platform.” *Multimedia Tools and Applications* 82, no. 3 (2023): 3303–33. <https://doi.org/10.1007/s11042-022-13076-8>.
- Siblini, Rana. “Developing Arabic Language Skills for Academic Purposes: An Approach to Critical Reading.” *Romano-Arabica* 25 (2025): 165–77. https://doi.org/10.62229/roar_xxv/8.
- Soh, Donny, Indriyati Atmosukarto, Tong Rong, Ian McLoughlin, Lim Jing Hao, Mohamed Sirajudeen, Justin Kan, et al. *Leveraging*

- Generative AI for Primary School Mother Tongue Language Learning: A Scalable and Adaptive AI-Driven Approach*. 2026. https://doi.org/10.1007/978-3-032-16157-4_3.
- Syafei, Isop, Eman Suleman, and Rohanda Rohanda. "The Development of Student Reading Skills in Arabic for Reading Islamic Classical Books Using the Arabic Learning Model at Indonesian Islamic Boarding Schools." *Theory and Practice in Language Studies* 14, no. 5 (2024): 1381–92. <https://doi.org/10.17507/tpls.1405.10>.
- Vo, Thi Kim Anh, and Huong Nguyen. "Generative Artificial Intelligence and ChatGPT in Language Learning: EFL Students' Perceptions of Technology Acceptance." *Journal of University Teaching and Learning Practice* 21, no. 6 (2024). <https://doi.org/10.53761/frlrkj58>.
- Xu, Tianyuan, and Huang Wang. "The Effectiveness of Artificial Intelligence on English Language Learning Achievement." *System* 125 (2024): 103428. <https://doi.org/10.1016/j.system.2024.103428>.
- Yang, Mei-Lan. "Artificial Intelligence versus Human Teacher Assistants and Language Learners' Progress in Learning and Retention of Complex Sentences." *Current Psychology* 44, no. 7 (2025): 6292–304. <https://doi.org/10.1007/s12144-025-07488-6>.
- Yunianti, Fitria Sari, A. Syahid Robbani, Khafidhoh, Siti Salamah, and Mohamad Nor Amin Samsun Baharun. "Enhancing Arabic Language Reading Skills Through Arabic News Anchors: A Comparative Study of Indonesian and Malaysian Students." *Pertanika Journal of Social Sciences and Humanities* 33, no. 3 (2025). <https://doi.org/10.47836/pjssh.33.3.03>.
- Zhang, Haiwei, and Shucheng Yang. "Culture Matters for Hanzi Learning Enjoyment and Hanzi Recognition: Evidence from Arabic Learners of Chinese as a Second/Foreign Language." *International Journal of Applied Linguistics* 35, no. 4 (2025): 2049–62. <https://doi.org/10.1111/ijal.12750>.