



Challenges of Arabic Language Learning in the 21st Century: A Pedagogical, Digital, and Cultural Study

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Abstrak

Arabic language learning in the 21st century is increasingly important to study because pedagogical, digital, and cultural changes demand a more communicative, adaptive, and relevant learning orientation to the needs of modern education. This article aims to identify the main challenges of Arabic language learning, explain the interrelationships among pedagogical, digital, and cultural challenges, and formulate directions for transforming 21st-century Arabic language learning. This research employs a qualitative approach grounded in a conceptual literature review. Data was collected through a search of academic literature from Google Scholar, DOAJ, Garuda, and Scopus or Sinta-indexed articles, with relevant inclusion and exclusion criteria. Analysis was conducted thematically-conceptually to find patterns, relationships, and synthesis of ideas from various sources. The results show that pedagogical challenges include the dominance of grammatical-memorization approaches, limitations of active learning, and teacher competence; digital challenges include technological literacy, infrastructure, and AI integration; while cultural challenges relate to learners' perceptions, identity, and social context. This article concludes that the transformation of Arabic language learning needs to be directed towards a communicative-integrative approach, appropriate technology-based solutions, and cultural sensitivity. Further research is suggested to test these conceptual findings through empirical studies in various educational contexts.

Keywords: Arabic language, 21st-century learning, pedagogy, digital, culture.

INTRODUCTION

Arabic language learning in the 21st century is increasingly complex because it is no longer sufficient to be understood as merely a process of mastering language rules. Arabic is taught in various contexts, ranging from schools, Islamic boarding schools, universities, community institutions, and digital spaces. These changes demand more communicative, adaptive, and contextual learning. In this context, the challenges of Arabic language learning are not only

linguistic but also pedagogical, technological, and related to learners' cultural diversity (Almelhes, 2023; Soliman & Khalil, 2022).

The urgency of this study is strengthened by the increasing need for students for functional language competence. Arabic language learning in the modern era is not only about reading religious texts and understanding grammatical structures, but also about communicating, collaborating, thinking critically, and using digital learning resources. Almelhes and Alsaiani (2024) emphasize the importance of communicative, collaborative, and constructivist approaches in teaching Arabic as a second language. This indicates that Arabic language learning needs to move from a transmissive orientation to a more active, meaningful learning experience.

Recent trends in the literature indicate that digitalization is an important issue in Arabic language learning. After the COVID-19 pandemic, online learning, digital platforms, mobile applications, educational games, and artificial intelligence are increasingly discussed as part of the transformation of language education. Kerras and Essayahi (2022) show the need for a communicative framework in online Arabic learning, while Abdullatif and Alsubaie (2022) highlight teachers' acceptance of digital Arabic literacy platforms. Other studies also show the potential of digital games, Duolingo, OER, and AI in supporting more interactive learning (Madwi, 2025; Ghani et al., 2022; Ritonga et al., 2022).

However, technological developments do not necessarily solve the problems of Arabic language learning. A number of studies show that pedagogical challenges remain quite prominent, including the dominance of traditional methods, limitations of active learning strategies, low student engagement, and uneven teacher competence in designing learning. Daud et al. (2025) found that Arabic language learners face obstacles in script, vocabulary, grammar, and cultural context, requiring more flexible strategies. Jamil et al. (2024) also emphasized that online Arabic teaching requires integrated pedagogical, managerial, and content skills.

In addition to pedagogical and digital issues, the cultural dimension is also an important part of 21st-century Arabic language learning. The Arabic language carries cultural content, identity, social values, and scholarly traditions that are not always easy for non-Arabic learners to understand. In multicultural communities, Arabic language learning often faces challenges related to dialect variation, cultural representation, motivation, and the relevance of teaching materials. Yoyo et al. (2023) showed that integrating Arabic cultural elements can help language comprehension while building multicultural awareness. Rusli et al. (2024) also emphasized that socio-cultural context influences the implementation of Arabic language learning in Muslim minority environments.

The main gap underlying this article lies in the tendency for discussions to remain separate between pedagogical, digital, and cultural aspects. Some studies emphasize learning methods, others focus on technology, while cultural studies are often placed as an additional issue. In fact,

all three are interrelated in shaping the success of Arabic language learning. For example, technology requires appropriate pedagogical design, while learning design must consider students' cultural backgrounds. Therefore, a conceptual study is needed that systematically unites these three dimensions to understand the challenges and directions of transformation in Arabic language learning.

Based on this background, this article aims to examine the main challenges of Arabic language learning in the 21st century, explain the relationship between pedagogical, digital, and cultural challenges, and formulate directions for transforming Arabic language learning to be relevant to the needs of modern education. Theoretically, this article is expected to enrich the discourse on Arabic language education through an integrative conceptual synthesis. In practice, this discussion can serve as a reference for educators, curriculum developers, and educational institutions in designing Arabic language learning that is communicative, adaptive, technology-based, and sensitive to cultural contexts.

METHOD

This research uses a conceptual literature review method with an integrative literature review approach. This approach was chosen because the research aims to build a conceptual understanding of the challenges of Arabic language learning in the 21st century by critically reviewing relevant scientific literature. The literature reviewed includes journal articles, academic books, conference proceedings, and scientific documents on Arabic language learning, 21st-century pedagogy, educational technology, digital literacy, and cultural dimensions of learning. Data were analyzed using thematic analysis, grouping literature findings into three main themes: pedagogical challenges, digital challenges, and cultural challenges. The analysis results were synthesized to formulate a conceptual map and strategic directions for the development of Arabic language learning aligned with the needs of 21st-century education.

Based on the focus of the conceptual literature review, this research is directed at answering conceptual questions about the challenges of Arabic language learning in the 21st century. Research questions include identifying the main challenges in Arabic language learning, examining the relationships among pedagogical, digital, and cultural dimensions, and formulating directions for learning transformation that are more relevant to the needs of modern education. Thus, the research questions are not directed at empirical measurement, but rather at constructing an argumentative and contextual theoretical synthesis.

Data collection techniques in this research were carried out through a conceptual literature review, with literature sourced from Google Scholar, DOAJ, Garuda, and Scopus- or Sinta-indexed databases. Searches used keywords such as "21st century Arabic language learning", "challenges of Arabic language learning", "Arabic language learning challenges", and "Arabic

language education digital learning". Literature was selected based on inclusion criteria: relevance to Arabic language learning, educational technology, or 21st-century education; publication dates 2021–2026; academic in nature; and related to pedagogical, digital, or cultural aspects.

RESULTS AND DISCUSSION

Results of Exclusion and Inclusion Criteria Selection

At this stage, the results of the literature search are selected based on their significance and conformity with the established inclusion and exclusion criteria. This filtering process resulted in 20 journal articles deemed most relevant for further analysis. After that, data were scanned to assess the quality and suitability of each source. The results of this assessment are presented in Table 2, which shows whether each literature was used or not in this research.

Table 2: Results of Exclusion and Inclusion

No	Author (Year)	Article Title	RQ 1	RQ 2	RQ 3	Result
1	Daud et al. (2025)	Exploring the Challenges and Strategies of Learning Arabic Language among Primary School Teachers	✓	✓	✓	Highly relevant; maps linguistic-pedagogical barriers and offers visual, collaborative, narrative, game-based strategies, as well as technology integration.
2	Jamil et al. (2024)	Bridging Gaps in Online Arabic Language Instruction: Addressing Key Challenges in Higher Education Institutions	✓	✓	✓	Highly relevant; links constraints of online facilities, student engagement, instructor competence, and online Arabic learning design.
3	Soliman & Khalil (2022)	The teaching of Arabic as a community language in the UK	✓	✓	✓	Relevant; highlights issues of approach, materials, communication, dialects, and the position of the Arabic language in a multicultural community context.
4	Almelhes (2024)	Enhancing Arabic Language Acquisition: Effective Strategies for Addressing Non-Native Learners' Challenges	✓	✓	✓	Highly relevant; discusses challenges for non-Arabic learners and strategies through feedback, adaptive curriculum, technology, multimedia, and culture.
5	Almelhes & Alsaiani (2024)	A Conceptual Framework for Teaching Arabic as a Second Language	✓	✓	✓	Highly relevant for pedagogical transformation; the 3Cs framework connects communicative, collaborative, and social constructivism.
6	Kerras & Essayahi (2022)	Education and COVID-19: Learning Arabic Language and Perspectives	✓	✓	✓	Relevant; links barriers to online Arabic learning, communicative approaches, and emotional awareness in the post-pandemic context.
7	Ghani et al. (2022)	The Impact of Mobile Digital Game in Learning Arabic Language at Tertiary Level	—	✓	✓	Relevant as a source of digital-pedagogical transformation; mobile games support interactive, student-centered learning, and vocabulary.
8	Calafato (2023)	Charting the motivation, self-efficacy beliefs, language learning strategies, and achievement of multilingual university	✓	✓	✓	Relevant; reviews motivation, self-efficacy, learning strategies, achievement of multilingual Arabic learners, and the role of digital strategies.

		students learning Arabic as a foreign language				
9	Al-Abdullatif & Alsubaie (2022)	Using Digital Learning Platforms for Teaching Arabic Literacy: A Post-Pandemic Mobile Learning Scenario in Saudi Arabia	✓	✓	✓	Relevant for digital aspects; explains factors of teacher acceptance of Arabic literacy platforms and implications of technology adoption.
10	Al-wattar (2025)	Parental Perspectives on Distance Learning Challenges for Arabic Language Instruction in Kuwait's Fifth Grade	✓	✓	✓	Relevant; shows challenges of distance learning Arabic from parents' perspectives, interaction, home support, and digital tools.
11	Rajab et al. (2025)	Traditional or Digital? Inspiring Teachers' Preferences in Arabic Language Primary Education in Malaysia	✓	✓	✓	Highly relevant; discusses the push and pull between traditional and digital methods, resource gaps, teacher training, and pedagogical interactive tools.
12	Hosman et al. (2024)	An Overview of Arabic Language Open Educational Resources (OER) for Primary and Secondary Education and Their Use in Offline Environments	✓	✓	✓	Relevant; highlights limitations of Arabic OER, connectivity, offline use, and the need for local resources according to curriculum and culture.
13	Tao & Gao (2022)	Teaching and learning languages online: Challenges and responses	✓	✓	✓	Supportive; not specific to Arabic, but useful for understanding challenges and responses in online language learning.
14	Ritonga et al. (2022)	Duolingo: An Arabic Speaking Skills' Learning Platform for Andragogy Education	✓	✓	✓	Relevant; evaluates the Duolingo platform for Arabic speaking skills, including its opportunities and limitations for beginner and advanced learners.
15	Rusli et al. (2024)	Arabic Language Implementation Viewed from A Social and Cultural Perspective at Maitreechit Withayattan School Bangkok	✓	✓	✓	Highly relevant; placing Arabic learning within the socio-cultural context of Muslim minorities and emphasizing methodological innovation and external collaboration.
16	Nasution et al. (2024)	Learning Arabic Language Sciences Based on Technology in Traditional Islamic Boarding Schools in Indonesia	✓	✓	✓	Highly relevant; connects the pesantren tradition, learning Arabic language sciences, technology adoption, and transformation without eliminating classical methods.
17	Alakrash & Razak (2021)	Technology-Based Language Learning: Investigation of Digital Technology and Digital Literacy	—	✓	✓	Supportive; not Arabic, but strengthens arguments about digital literacy, technology use, and teacher-student competence in language learning.
18	Yoyo et al. (2023)	Cultural Perceptions of Santri on Arabic Language Learning	✓	✓	✓	Highly relevant for the cultural dimension; shows the importance of Arabic cultural elements in learning and multicultural understanding.
19	Madwi (2025)	Integrating Artificial Intelligence in Arabic Language Education: Challenges and Opportunities	✓	✓	✓	Highly relevant; discusses AI in Arabic language education, grammatical constraints, dialects, digital resources, and opportunities for learning innovation.
20	Eljattari et al. (2025)	Cultural Perspectives on Digital Scaffolding for Bilingual Education and Artificial Intelligence	—	✓	✓	Strong support for RQ2 and RQ3; discusses digital scaffolding, AI, bilingual education, and cultural sensitivity in modern learning

General Map of Challenges in Arabic Language Learning in the 21st Century

Arabic language learning in the 21st century cannot be understood merely as a process of mastering linguistic rules; it must be contextualized within the dynamics of changing social, technological, and cultural learning environments. Technological advancements in the 21st century have transformed how the younger generation communicates, socializes, and acquires and processes information (Ritonga et al., 2022). The increasing complexity of classrooms makes it increasingly challenging to ensure that learners from diverse backgrounds achieve learning objectives (Rusli et al., 2024). This condition demands a comprehensive reorientation of the Arabic language learning paradigm.

Conceptually, the challenges of contemporary Arabic language learning encompass interacting pedagogical, digital, and cultural dimensions. The integration of digital technology into the teaching process has become essential at all levels of education. However, Arabic language teachers still lack the confidence and digital competence needed to integrate technology into their teaching practices (Almelhes & Alsaiani, 2024). On the other hand, the importance of integrating cultural components and accommodating learner diversity has emerged as a significant finding across various studies (Kerras & Essayahi, 2022).

A synthesis of the literature indicates that 21st-century competency demands require a more holistic, adaptive learning approach. Educational systems in the technological era strive to equip students with essential 21st-century skills to develop relevant competencies (Alakrash & Razak, 2021). Approaches that promote active student engagement can facilitate comprehensive learning and real-world application (Rusli et al., 2024). The implication is that Arabic language learning must shift from a structural-grammatical orientation to a communicative-integrative approach responsive to changing times.

Pedagogical Challenges in 21st-Century Arabic Language Learning

Literature review findings indicate that Arabic language learning is still dominated by traditional approaches that emphasize grammar mastery and memorization. The practice of traditional teaching strategies tends to reduce the fun factor and lead to low motivation and a lack of enjoyment in Arabic language classes (Ghani et al., 2022). This condition is exacerbated by learning models in traditional Islamic boarding schools that still maintain the *bandongan*, *sorogan*, and *wetonan* methods (Nasution et al., 2024). The dominant grammatical approach neglects students' communicative needs in the contemporary era.

Conceptually, reliance on memorization and grammar creates a gap between linguistic competence and communicative ability. Second language learning, such as Arabic, requires mastering speaking skills not only through vocabulary and grammar information, but also through

conversational practice (Almelhes & Alsaiani, 2024). Teaching methods that are less innovative and lack variety in learning contribute to low student interest (Rusli et al., 2024). The implication is that a paradigm shift is needed from a structural approach to a communicative approach that integrates functional aspects of language.

Literature reviews indicate that implementing active learning methods in Arabic remains challenging. Students need to be taught in a more interactive way and exposed to electronic materials for independent learning practice to develop enjoyment in Arabic language classes. Digital game-based learning can develop students' thinking skills, increase enjoyment during learning, and stimulate active learning (Ghani et al., 2022). However, its application remains limited across various educational institutions. The limitations of active methods are also related to an environment that is not yet conducive to learning. An ideal learning environment should encourage the acquisition of new skills and ideas and help learners communicate in a new language through familiar concepts. The 3Cs approach, which combines communicative language teaching, collaborative learning, and social constructivist theory, offers a solution to increase active student engagement (Almelhes & Alsaiani, 2024). This synthesis shows the urgency of developing student-centered methods to optimize 21st-century Arabic language learning.

Teacher competence is a crucial factor determining the success of Arabic language learning. One reason traditional Islamic boarding schools do not use learning technology is teachers' limited competence in its use (Nasution et al., 2024). Arabic language teachers lack the confidence and digital competence needed to integrate digital technology into their teaching practices (Al-Abdullatif & Alsubaie, 2022). This condition creates a gap between the demands of 21st-century learning and teachers' pedagogical capacity.

Teacher creativity is essential in designing effective learning, although students must also play a role by responding positively to learning proposals. Thorough instructor preparation is very important for learning success (Kerras & Essayahi, 2022). In this context, continuous professional development and technology investment are urgent needs (Jamil et al., 2024). The implication is that teacher capacity-building programs must include pedagogical, managerial, and subject-specific competencies to address the complexity of contemporary Arabic language learning.

Digital Challenges in 21st-Century Arabic Language Learning

Digital literacy is a fundamental prerequisite in contemporary Arabic language learning. The increasing use of digital technology in society demands digital literacy among students so that they can succeed in both academic and professional life (Alakrash & Razak, 2021). However, Arabic language teachers still lack the confidence and digital competence needed to integrate technology into their teaching practices (Al-Abdullatif & Alsubaie, 2022). This digital literacy gap creates structural barriers in the transformation of Arabic language learning.

This condition is exacerbated by teachers' limited competence in using learning technology,

which is one reason traditional educational institutions have not optimized technology (Nasution et al., 2024). Educators must have digital literacy to help students bridge the digital skills gap in the modern era (Alakrash & Razak, 2021). This synthesis shows that improving the digital literacy of teachers and students is an urgent need to meet the demands of 21st-century learning.

Literature reviews show that although educators have widely used various technological tools, the results have not been optimal (Ritonga et al., 2022). Digital game-based learning can create a fun learning environment and encourage student participation in classroom activities (Ghani et al., 2022). Digital technology applications have the potential to improve literacy skills, including listening, speaking, reading, and writing, and make learning more flexible and motivating (Al-Abdullatif & Alsubaie, 2022). However, its implementation still faces various technical and pedagogical obstacles.

Significant challenges in the use of digital media include unstable internet connectivity and difficulty in assessing language proficiency (Jamil et al., 2024). Students need to be taught in a more interactive way and exposed to electronic materials for self-study practice (Ghani et al., 2022). Instructors have responded by adopting strategies such as lecture recordings, interactive activities, and customized instruction (Jamil et al., 2024). The implication is that technological investment and continuous professional development are needed to optimize the use of digital media in Arabic language learning.

The rapid development of artificial intelligence and machine learning has introduced significant changes in the Arabic language education sector. AI technologies such as natural language processing, machine translation, and speech recognition have significantly improved Arabic language learning tools (Madwi, 2025). Culturally sensitive digital scaffolding, combined with AI, offers a sustainable path to advancing bilingual education (Eljattari et al., 2025). However, the integration of AI in Arabic language learning still faces various complex challenges.

Key challenges relate to the complexity of Arabic grammar, the diversity of regional dialects, and the lack of standardized digital resources and linguistic data (Madwi, 2025). Logistical barriers include limited institutional resources, fragmented educational policies, and the tension between Modern Standard Arabic and various Arabic dialects (Eljattari et al., 2025). These conditions indicate that developing effective machine learning models for understanding and processing Arabic requires intensive collaboration between linguistic experts and technology developers.

The author's synthesis suggests that with sustained investment in AI technology and collaboration between linguists and technology developers, the future of Arabic language learning can be significantly enhanced (Madwi, 2025). The use of more varied digital language-learning strategies appears to prevent a decline in student motivation and self-efficacy beliefs (Calafato, 2023). The implication is that integrating AI into 21st-century Arabic language learning requires

an approach that considers Arabic's linguistic uniqueness and learners' cultural contexts to produce a more efficient, personalized learning experience.

Cultural Challenges in 21st-Century Arabic Language Learning

The perception of Arabic language complexity becomes a significant psychological barrier for learners. Difficulties in developing effective learning models are closely related to the complexity of Arabic, the diversity of dialects, and intricate grammatical rules (Ghani et al., 2022). Key challenges include the complex script system, root word system, vowels, homographs, gender, and cultural context (Nasution et al., 2024). This perception tends to lower learners' motivation and self-efficacy beliefs before the learning process can begin optimally.

Conceptually, the perception of Arabic language difficulty is not entirely objective; it is also socially and culturally constructed. Learners often struggle to maintain or increase their motivation and self-efficacy beliefs throughout the learning process (Kerras & Essayahi, 2022). The 3Cs approach, which combines communicative teaching, collaborative learning, and social constructivist theory, can help overcome these negative perceptions (Yoyo et al., 2023). The implication is that a reframing of perceptions is needed through pedagogical approaches that emphasize Arabic's accessibility and relevance in contemporary life.

Literature reviews also tend to reduce Arabic to a religious language. Santri generally recognize the importance of integrating Arab cultural elements into the language-learning process, and some aspects of Arab culture are perceived as integral to Islamic teachings (Rusli et al., 2024). The learning model in traditional Islamic boarding schools still maintains classical methods such as *bandongan*, *sorogan*, and *wetonan*, which are oriented towards religious texts (Almelhes & Alsaiani, 2024). This condition limits the exploration of the Arabic language's communicative and professional dimensions.

This reduction overlooks the broader potential of Arabic. Arabic language skills can provide a competitive advantage in careers in government and professional sectors (Al-Abdullatif & Alsubaie, 2022). Neomodernist figures like Nurcholish Madjid emphasize the importance of Arabic for the spiritual life of Muslims, but its use in ritual worship must be accompanied by efforts to understand its meaning (Rusli et al., 2024). This synthesis shows the urgency of expanding the orientation of Arabic language learning to include academic, professional, and intercultural dimensions in the 21st century.

The thematic findings indicate that a passive learning culture still dominates Arabic language learning practices. Traditional strategic practices in teaching tend to reduce the fun factor and lead to low motivation and a lack of enjoyment in Arabic language classes (Calafato, 2023). Low student interest is influenced by less innovative teaching methods and a lack of variety in learning (Al-Abdullatif & Alsubaie, 2022). This passive learning culture creates a gap between learners' receptive and productive competencies.

Transformation towards an active learning culture requires a fundamental pedagogical paradigm shift. Students need to be taught in a more interactive way and exposed to electronic materials for self-study practice. Digital game-based learning can develop students' thinking skills and stimulate active learning (Calafato, 2023). Approaches that promote active student engagement can facilitate comprehensive learning and real-world application (Yoyo et al., 2023). Consequently, 21st-century Arabic language learning requires strategies that encourage active, collaborative participation to develop authentic communicative competence.

The literature review findings further reveal that pedagogical, digital, and cultural challenges in Arabic language learning do not stand in isolation but interact dynamically. Traditional strategic practices in teaching that emphasize memorization tend to reduce motivation and enjoyment of learning (Ghani et al., 2022). This condition is exacerbated by teachers' weak competence in using learning technology (Nasution et al., 2024). This interconnectedness indicates that pedagogical transformation requires adequate support for digital literacy from all education stakeholders.

Conceptually, the integration of digital technology in Arabic language learning cannot be separated from the learners' cultural context. Educators must have digital literacy to help students bridge skill gaps in the modern era (Alakrash & Razak, 2021). Culturally sensitive digital scaffolding offers a sustainable path to advance bilingual education (Eljattari et al., 2025). This synthesis affirms that the effectiveness of learning technology heavily depends on its suitability with cultural values and the specific pedagogical needs of the learning context.

The triadic relationship between these three dimensions of challenges creates its own complexity in learning implementation. Low student interest is influenced by less innovative teaching methods and a lack of variety in learning (Rusli et al., 2024). The application of digital technology has the potential to improve literacy skills and make learning more flexible and motivating (Al-Abdullatif & Alsubaie, 2022). However, challenges related to the complexity of Arabic grammar, dialect diversity, and the lack of standardized digital resources remain significant obstacles (Madwi, 2025). The implications of the relationship among these three dimensions of challenge demand a holistic approach to the development of 21st-century Arabic language learning. The 3Cs approach, which combines communicative teaching, collaborative learning, and social constructivist theory, can be an integrative solution (Almelhes & Alsaiari, 2024). The need for pedagogical, managerial, and specific content skills becomes increasingly complex in the context of online learning (Jamil et al., 2024). Thus, the success of contemporary Arabic language learning requires synergy among pedagogical innovation, the appropriate use of technology, and sensitivity to learners' cultural dynamics.

Directions for Arabic Language Learning Transformation in the 21st Century

The urgency of shifting paradigms from teacher-centered learning to student-centered learning. Digital game-based learning can promote student-centered, interactive learning and

create an enjoyable learning environment (Ritonga et al., 2022). The 3Cs approach, which combines communicative teaching, collaborative learning, and social constructivist theory, promotes active student engagement (Almelhes & Alsaiani, 2024). This transformation facilitates comprehensive learning and real-world application in contemporary Arabic.

The shift towards communicative-integrative learning is necessary to address 21st-century needs. Second language learners, such as Arabic learners, require speaking ability not only through mastery of vocabulary and grammar, but also through conversational practice (Almelhes & Alsaiani, 2024). Arabic language instructors need to focus on developing tailored curricula and integrating technology and multimedia resources (Rusli et al., 2024). A communicative approach combined with emotional education is key to achieving positive learning outcomes (Kerras & Essayahi, 2022).

Digital transformation demands a repositioning of technology from merely a tool to a comprehensive learning ecosystem. The application of digital technology has the potential to enhance literacy skills and make learning more flexible, participatory, and motivating. The integration of digital technology into the teaching and learning process has become essential at all levels of education (Almelhes, 2024). The success of digital transformation requires comprehensive awareness-building initiatives and differentiated training approaches (Al-Abdullatif & Alsubaie, 2022).

The final direction of transformation emphasizes the importance of integrating cultural dimensions into Arabic language learning. The importance of integrating cultural components and accommodating learner diversity in the classroom is a significant finding (Rusli et al., 2024). Culturally sensitive digital scaffolding offers a sustainable pathway to advance bilingual education and promote intercultural understanding (Alakrash & Razak, 2021). This synthesis indicates that 21st-century Arabic language learning must integrate cultural contexts to produce authentic and meaningful communicative competence.

Conceptual Synthesis and Research Implications

Pedagogical, digital, and cultural challenges in Arabic language learning form a complex and interconnected configuration. The 3Cs approach, which integrates communicative teaching, collaborative learning, and social constructivist theory, offers a conceptual framework for addressing these complexities (Almelhes, 2024). The need for specific pedagogical, managerial, and content skills is becoming increasingly urgent in contemporary learning (Jamil et al., 2024). The integration of these three dimensions requires a holistic approach that takes into account the unique characteristics of Arabic.

Conceptually, the transformation of 21st-century Arabic language learning demands a balance between preserving traditional values and adopting technological innovations. Traditional Islamic boarding schools exhibit a positive attitude toward technology, accepting its presence

while maintaining classical learning methods (Nasution et al., 2024). Culturally sensitive digital scaffolding offers a sustainable pathway to advance bilingual education and intercultural understanding (Eljattari et al., 2025). This synthesis affirms that modernizing learning need not sacrifice cultural identity or traditional values.

The implications of this study include three strategic dimensions for the development of Arabic language learning. First, instructors need to focus on developing tailored curricula and integrating technology and multimedia resources (Almelhes, 2024). Second, investment in technology and continuous professional development are prerequisites for successful digital transformation (Jamil et al., 2024). Third, integrating cultural components and accommodating learner diversity must be a priority in instructional design (Almelhes, 2024). Thus, 21st-century Arabic language learning requires a systematic synergy between pedagogical innovation, appropriate technology utilization, and cultural sensitivity.

CONCLUSION

This research concludes that the challenges of Arabic language learning in the 21st century do not stand alone but are shaped by the interconnectedness of pedagogical, digital, and cultural dimensions. Key findings indicate that the dominance of grammatical-memorization approaches, limitations in active learning, and teachers' non-adaptive competencies remain significant pedagogical issues; meanwhile, digital literacy gaps, infrastructure limitations, and the complexity of integrating technology and AI reinforce digital challenges. At the same time, perceptions of Arabic as a complex language, the reduction of Arabic to a religious language, and passive learning cultures indicate that cultural factors also influence learning success. These results indicate that the transformation of Arabic language learning needs to be directed towards a communicative-integrative, student-centered approach, based on appropriate technology, and sensitive to learners' socio-cultural backgrounds. Theoretically, these findings reinforce previous research that positions Arabic language learning as a multidimensional practice rather than merely the mastery of linguistic structures. In practice, the implications call for strengthening curriculum design, teacher training, digital media development, and the integration of cultural values into learning. The limitation of this study lies in its conceptual, literature-based nature, which does not directly capture the empirical experiences of teachers and students. Therefore, future research can explore the implementation of 21st-century Arabic language-learning models through field studies, classroom action research, or testing digital-cultural instructional designs.

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