



Journal of Arabic Linguistics and Education
Vol. 11 No. 2, June 2026, 228-244
P-ISSN: 2477-5371; E-ISSN: 2503-2690

THE LEARNING PROCESS OF ARABIC SPEAKING SKILLS AS A FOREIGN LANGUAGE IN FORMAL EDUCATION SETTINGS: COMPLEXITY AND DETERMINING FACTORS

Wahyudin

Universitas Islam Negeri Siber Syekh Nurjati Cirebon
wahyudin@uinssc.ac.id

Muhamad Rachmatul Aziz

Universitas Islam Negeri Siber Syekh Nurjati Cirebon
rachmatulaziz@syekhnurjati.ac.id

Abstract

Speaking skills (mahārah al-kalām) are one of the primary objectives of learning Arabic as a foreign language; however, their development within formal educational contexts continues to face various challenges. These challenges are not limited to linguistic aspects but are also influenced by speaking anxiety, limited Arabic-speaking environments, less communicative teaching approaches, and the suboptimal use of technology. This study aims to analyze the factors influencing the development of Arabic speaking skills as a foreign language and to identify effective instructional strategies based on findings from previous studies. This research employed a Systematic Literature Review (SLR) method guided by the PRISMA 2020 framework. Data were obtained from Scopus, SpringerLink, DOAJ, and Google Scholar, covering publications from 2015 to 2025. Of the 1,022 articles initially identified, 50 studies were included for analysis after the removal of duplicates, screening, and eligibility assessment. The selected studies were thematically analyzed using the Braun and Clarke framework. The findings indicate that the development of speaking skills is influenced by the interaction of five main domains: linguistic, psychological, sociocultural and environmental, pedagogical, and technological. Communicative approaches, such as Task Based Language Teaching (TBLT) and Project Based Learning (PjBL), were consistently associated with improved speaking proficiency, while speaking anxiety emerged as one of the major inhibiting factors. The use of Computer Assisted Language Learning (CALL), Mobile Assisted Language Learning (MALL), and technology-supported project based learning also expanded opportunities for practice and enhanced learner participation, although their effectiveness was influenced by teachers' digital literacy and the availability of technological infrastructure. Therefore, Arabic speaking instruction needs to be developed holistically and contextually by simultaneously integrating these five domains.

Keywords: *Mahārah al-Kalām, Arabic as a Foreign Language, Task Based Language Teaching, Project Based Learning, Mobile Assisted Language Learning.*

Abstrak

Keterampilan berbicara (*mahārah al-kalām*) merupakan salah satu tujuan utama dalam pembelajaran bahasa Arab sebagai bahasa asing, tetapi pencapaiannya dalam konteks pendidikan formal masih menghadapi berbagai kendala. Kesulitan tersebut tidak hanya berkaitan dengan aspek linguistik, tetapi juga dipengaruhi oleh kecemasan berbicara, keterbatasan lingkungan berbahasa Arab, pendekatan pembelajaran yang kurang komunikatif, serta pemanfaatan teknologi yang belum optimal. Penelitian ini bertujuan untuk menganalisis faktor-faktor yang memengaruhi perkembangan keterampilan berbicara bahasa Arab sebagai bahasa asing serta mengidentifikasi strategi pembelajaran yang efektif berdasarkan hasil penelitian terdahulu. Penelitian ini menggunakan metode *Systematic Literature Review (SLR)* yang mengacu pada pedoman PRISMA 2020. Data diperoleh dari Scopus, SpringerLink, DOAJ, dan Google Scholar terhadap publikasi tahun 2015–2025. Dari 1.022 artikel yang teridentifikasi, setelah proses duplikasi, penyaringan, dan penilaian kelayakan, diperoleh 50 studi yang dianalisis secara tematik menggunakan kerangka Braun dan Clarke. Hasil penelitian menunjukkan bahwa perkembangan keterampilan berbicara dipengaruhi oleh interaksi lima domain utama, yaitu linguistik, psikologis, sosial-budaya dan lingkungan, pedagogis, serta teknologi. Pendekatan komunikatif seperti *Task Based Language Teaching (TBLT)* dan *Project Based Learning (PjBL)* secara konsisten berkaitan dengan peningkatan kemampuan berbicara, sedangkan kecemasan berbicara menjadi salah satu faktor penghambat utama. Pemanfaatan *Computer Assisted Language Learning (CALL)*, *Mobile Assisted Language Learning (MALL)*, dan pembelajaran berbasis proyek berbantuan teknologi juga memperluas kesempatan praktik dan meningkatkan partisipasi, meskipun efektivitasnya dipengaruhi oleh literasi digital guru dan ketersediaan infrastruktur. Dengan demikian, pembelajaran keterampilan berbicara bahasa Arab perlu dikembangkan secara holistik dan kontekstual dengan mengintegrasikan kelima domain tersebut secara simultan.

Kata Kunci: *Mahārah al-Kalām, Bahasa Arab sebagai Bahasa Asing, Pembelajaran Berbasis Tugas, Pembelajaran Berbasis Proyek, Pembelajaran Bahasa Berbantuan Perangkat Seluler.*

INTRODUCTION

Speaking proficiency (*mahārah al-kalām*) is widely described in the Arabic as foreign language literature as a central and often the primary goal of Arabic language learning, particularly within Islamic educational institutions, where it remains closely tied to students' broader engagement with the Arabic language and religious life.¹ Mastery of speaking enables learners to participate actively in discussions, express ideas, and build social relationships in Arabic. The distinctive linguistic profile of Arabic as a foreign language (its phonology, morphology, and

¹A. Erka Pulungan, et al., "Strategies for Developing Arabic Speaking Skills (Maharah Kalam) at Private Islamic Senior High School: A Descriptive Qualitative Study," *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 14, no. 1 (2026): 2768-2777, <https://doi.org/10.24256/ideas.v14i1.10815>.

register variation) also shapes how oral competence develops in instructed settings.² Nevertheless, in practice the achievement of speaking skills remains far from expectations.

Various challenges emerge in the process of learning Arabic speaking. A 2024 survey of final-year Professional Communication Arabic students at UiTM Shah Alam found that anxiety specific to Arabic speaking activities was high, alongside a strong fear of negative evaluation when speaking, indicating that many learners experience significant speaking anxiety when required to use Arabic actively in classroom interactions.³ Such anxiety manifests as fear of making mistakes, worry about negative evaluation by teachers and peers, and a lack of confidence when speaking. These constructs were first formalised in the foreign-language anxiety literature⁴ and shown to interfere with cognitive processing during second-language production.⁵ These psychological barriers are compounded by limited exposure to authentic Arabic-speaking environments outside the classroom.

Pedagogical factors also contribute to the complexity of learning speaking. Teaching practices that remain teacher-centred, with continued reliance on the grammar-translation method, are limited in developing speaking and listening skills, since this approach prioritises mastery of grammatical structure and text translation over active oral communication.⁶ Learning focuses more on memorising grammatical rules and vocabulary without providing sufficient space for communicative practice. Consequently, learners may possess declarative knowledge of Arabic yet remain weak in the procedural ability to use it in real communication.

Recent developments in language education indicate a paradigm shift towards communicative and learner-centred approaches. Task-Based Language Teaching (TBLT) and Project-Based Learning (PjBL) have emerged as two prominent methods reported to enhance speaking ability. TBLT emphasises authentic communicative tasks that encourage natural language use in meaningful contexts,⁷ while PjBL fosters intrinsic motivation, collaboration, and learner confidence

²Karin C. Ryding, *Teaching and Learning Arabic as a Foreign Language: A Guide for Teachers* (Washington, DC: Georgetown University Press, 2013), 141.

³Hanis Najwa Shaharuddin, et al., "The Level of Student Anxiety in Arabic Speaking Skills," *International Journal of Research and Innovation in Social Science* 8, no. 8 (2024): 2563-2571, <https://doi.org/10.47772/IJRISS.2024.8080195>.

⁴Elaine K. Horwitz, Michael B. Horwitz, and Joann Cope, "Foreign Language Classroom Anxiety," *The Modern Language Journal* 70, no. 2 (1986): 125-132, <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>.

⁵Peter D. MacIntyre and R. C. Gardner, "The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language," *Language Learning* 44, no. 2 (1994): 283-305, <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>.

⁶Intan Afriati, et al., "Grammar and Translation Methods in Arabic Language Learning: Theory and Practice," *MADINA: Journal of Islamic Studies* 2, no. 1 (2025): 1-8, <https://doi.org/10.62945/madina.v2i1.741>.

⁷Rod Ellis, *Task-Based Language Learning and Teaching* (Oxford: Oxford University Press, 2003), 220.

through engagement in projects relevant to learners' lives.⁸ Technology integration in language learning opens further opportunities. Computer Assisted Language Learning (CALL) and Mobile Assisted Language Learning (MALL) enable flexible and immersive speaking practice without spatial and temporal limitations.⁹ A true experimental study of Moroccan secondary-school EFL students found that mobile-assisted project-based learning was considerably more effective than conventional teaching or project-based learning alone in improving learners' overall speaking performance, evidence that plausibly extends to Arabic-as-foreign-language contexts using comparable mobile-assisted PjBL designs.¹⁰ Digital-based approaches also support the development of self-regulated learning, a critical need in twenty-first-century education.

Cultural factors also shape the success of learning Arabic speaking. Arabic is closely intertwined with Islamic cultural and spiritual values, yet “Arab culture” and “Islamic values” are overlapping rather than identical categories. Integrating culturally relevant elements into the curriculum has been associated with stronger motivation, engagement, and intercultural empathy among learners.¹¹ Learning that connects language with its users' cultural context tends to make materials more meaningful and relevant, encouraging deeper engagement. Although a growing body of research has examined individual facets of Arabic speaking instruction (anxiety, pedagogy, or technology in isolation), relatively few studies have synthesised these strands into a coherent, evidence-based whole. Existing reviews tend to privilege one dimension at a time, leaving the interactions among linguistic, psychological, socio-cultural, pedagogical, and technological factors underexplored. The present review addresses this gap. Its original contribution is an integrative five-domain framework that maps how these dimensions interact to shape speaking development, offering a basis for designing contextually grounded instructional models. Earlier work reports isolated interventions without locating them within a unified pedagogical ecology.

Building on this mapping, the review pursues three questions. First, what is the impact of technologies such as CALL and MALL on the development of Arabic speaking skills? Second, in what ways can the integration of Arab-Islamic culture into the curriculum enhance learner motivation and learning outcomes? Third, which pedagogical and psychological strategies are most

⁸Fredricka L. Stoller, "Establishing a Theoretical Foundation for Project-Based Learning in Second and Foreign Language Contexts," in *Project-Based Second and Foreign Language Education*, ed. Gulbahar H. Beckett and Paul C. Miller (Greenwich, CT: Information Age Publishing, 2006), 19-40.

⁹Agnes Kukulska-Hulme and Lesley Shield, "An Overview of Mobile Assisted Language Learning: From Content Delivery to Supported Collaboration and Interaction," *ReCALL* 20, no. 3 (2008): 271-289, <https://doi.org/10.1017/S0958344008000335>.

¹⁰Hassane Benlaghrissi and Lachhab Meriem Ouahidi, "The Impact of Mobile-Assisted Project-Based Learning on Developing EFL Students' Speaking Skills," *Smart Learning Environments* 11, no. 1 (2024): 1-30, <https://doi.org/10.1186/s40561-024-00303-y>.

¹¹Pulungan et al., "Strategies for Developing Arabic Speaking Skills," 2768-2777.

effective in reducing speaking anxiety among Arabic learners? These questions are addressed within the integrative framework: the technological, cultural, and pedagogical-psychological domains correspond to the first, second, and third questions respectively, while the linguistic and socio-environmental domains supply the cross-cutting context in which all three operate. By answering them, the review aims to contribute to more contextual, innovative, and evidence-based pedagogical models for Arabic language teaching.

METHOD

Design and Reporting

This study employed a Systematic Literature Review (SLR) designed and reported in accordance with the PRISMA 2020 statement¹² and the procedural guidelines of Kitchenham and Charters.¹³ PRISMA was adopted to ensure transparency and replicability across the identification, screening, eligibility, and inclusion stages; the corresponding flow is summarised in Figure 1. The review synthesised evidence on Arabic speaking skills from linguistic, psychological, socio-cultural, pedagogical, and technological perspectives, structured around the three research questions stated above.

Search Strategy

Comprehensive searches were conducted in four databases (Scopus, SpringerLink, DOAJ, and Google Scholar) for studies published between 2015 and 2025. This ten-year window was chosen to capture contemporary developments while remaining consistent with the included literature. Foundational theoretical works cited for conceptual grounding (for example, Vygotsky, Krashen, and Canale and Swain) fall outside this window and were treated as supporting references rather than as part of the SLR dataset. Search terms were combined in English, Arabic, and Indonesian using Boolean operators (AND, OR) and phrase quotation; the full strings appear in Table 1. Because Google Scholar returns broad and partly overlapping results, its hits were exported and merged with the other database records, and exact and near-duplicate entries were removed during deduplication.

Table 1. Search strings by database

Database	Representative search string (Boolean)
Scopus	TITLE-ABS-KEY (("Arabic speaking" OR "maharah al-kalam" OR "speaking skill*") AND ("task-based" OR "project-based" OR "mobile-assisted" OR "computer-assisted") AND ("foreign language" OR "second language"))

¹²Matthew J. Page et al., "The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews," *BMJ* 372 (2021): 71, <https://doi.org/10.1136/bmj.n71>.

¹³B. Kitchenham and S. Charters, *Guidelines for Performing Systematic Literature Reviews in Software Engineering* (Keele: Keele University, 2007), 3.

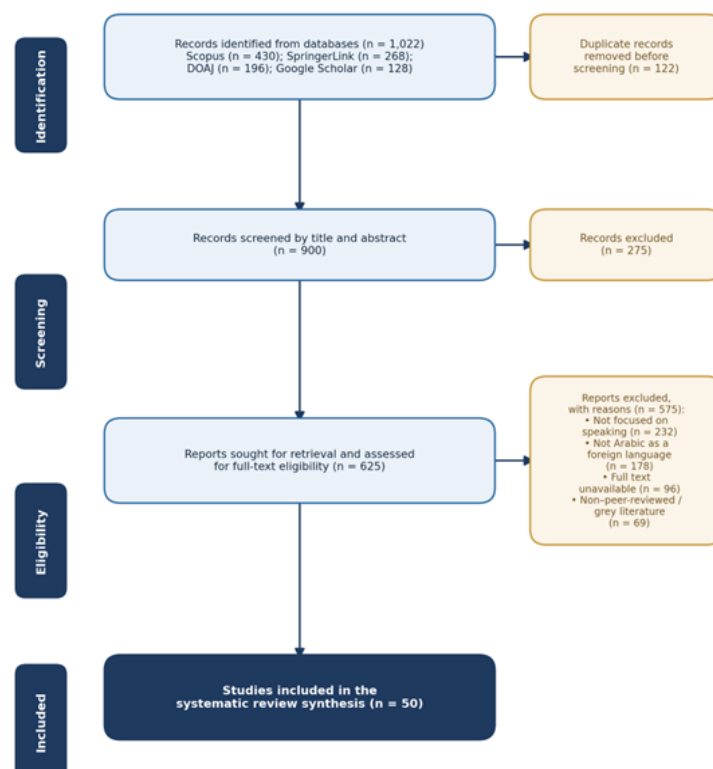
Database	Representative search string (Boolean)
SpringerLink	("Arabic speaking skills" OR "speaking anxiety") AND ("task-based language teaching" OR "project-based learning" OR "CALL" OR "MALL")
DOAJ	("keterampilan berbicara" OR "maharah kalam" OR "Arabic speaking") AND ("pembelajaran berbasis tugas" OR "berbasis proyek" OR "teknologi")
Google Scholar	مهاراة الكلام AND ("اللغة العربية" OR "التعليم بالمشروعات"); "Arabic speaking" AND ("mobile learning" OR "speech recognition" OR "speaking anxiety")

Note. Strings were adapted to each database's syntax; date filter 2015–2025 applied throughout.

Study Selection

The search returned 1,022 records (Scopus = 430; SpringerLink = 268; DOAJ = 196; Google Scholar = 128). After removing 122 duplicate records, 900 unique records were screened by title and abstract, of which 275 were excluded. The remaining 625 reports were assessed in full text against the eligibility criteria, and 575 were excluded with reasons: not focused on speaking (n = 232), not specific to Arabic as a foreign language (n = 178), full text unavailable (n = 96), and non-peer-reviewed or grey literature (n = 69). Fifty studies met all criteria and were retained for synthesis. The complete process is depicted in Figure 1.

Figure 1. PRISMA 2020 Flow Diagram of the Study Selection Process.



Eligibility Criteria

Studies were included if they (1) addressed Arabic speaking skills (*mahārah al-kalām*) as a foreign or second language; (2) were situated in formal education settings operationally defined as secondary schools, Islamic schools (*madrasah*), *pesantren*, and tertiary Arabic programmes rather than informal or self-study contexts; (3) involved TBLT, PjBL, CALL, MALL, or cultural integration; (4) were peer-reviewed journal articles or peer-reviewed conference proceedings; and (5) were available in full text in Arabic, English, or Indonesian. Conceptual and theoretical papers were admitted only as supporting literature and were not counted among the fifty empirical studies synthesised. Studies were excluded if they focused solely on reading, writing, or listening; were not peer-reviewed (for example, institutional reports, unpublished theses, or non-refereed outputs); or were unavailable in full text.

Quality Appraisal

Because the corpus combined quantitative, qualitative, and mixed-methods designs, methodological quality was appraised using the Mixed Methods Appraisal Tool (MMAT),¹⁴ which provides design-specific criteria. Each study was rated on the clarity of its research aims, the appropriateness of its design, the adequacy and validity of its instruments and data, and the coherence between findings and evidence. Quantitative studies were additionally checked for sampling and measurement adequacy, qualitative studies for analytic rigour and reflexivity, and mixed-methods studies for the integration of their components. Studies meeting at least four of the five MMAT criteria were classified as high quality and retained.

Data Extraction

A standardised extraction form recorded, for each study, the author(s) and year, country and educational context, educational level, research design, number of participants, the targeted aspect of speaking, the intervention or method, the principal findings, and the appraised quality. Table 2 presents an illustrative extract of the key studies underpinning the synthesis.

Table 2. Representative data extraction from the included studies

Study (year)	Context / level	Design	Speaking focus	Principal finding
Syafitri et al. (2026)	Indonesia; secondary school	Quasi-experiment	Fluency, overall proficiency	PjBL group showed clearly greater gains in speaking skills than the control group, alongside a high average increase in learning motivation.
Afriati et al.	Indonesia;	Theoretical/a	Oral	Grammar-translation

¹⁴Quan Nha Hong et al., "The Mixed Methods Appraisal Tool (MMAT) Version 2018 for Information Professionals and Researchers," *Education for Information* 34, no. 4 (2018): 285-291, <https://doi.org/10.3233/EFI-180221>.

Study (year)	Context / level	Design	Speaking focus	Principal finding
(2025)	conceptual	nalytical study	participation	instruction limits development of speaking and listening skills relative to communicative approaches.
Benlaghrissi & Ouahidi (2024)	Morocco; tertiary	Experiment	Fluency, anxiety	Mobile-assisted PjBL outperformed conventional and PjBL-only instruction in improving speaking performance (Moroccan EFL learners).
Al-Qahtani (2023)	Saudi Arabia; tertiary	Correlational	Fluency, accuracy	Speaking anxiety negatively correlated with fluency and accuracy.
Aqil et al. (2025)	Indonesia; madrasah/tertiary	Qualitative case study	Willingness to communicate	Peer and lecturer social support raised speaking confidence and willingness to speak, though formal-context anxiety persisted.
Pulungan et al. (2026)	North Africa; secondary	Mixed methods	Motivation, engagement	Documents maharah kalam as a central goal of Arabic instruction at a private Islamic senior high school.

Note. Table 2 is illustrative; the full extraction covered all 50 studies. Reported percentages are from individual primary studies, not pooled estimates.

Data Analysis and Synthesis

Extracted data were analysed thematically with MAXQDA 24 following the six-phase framework of Braun and Clarke: familiarisation, initial coding, searching for themes, reviewing themes, defining and naming themes, and reporting.¹⁵ A hybrid coding strategy was used. An initial deductive frame derived from the research questions (with codes such as “speaking anxiety,” “task design,” “mobile practice,” and “cultural relevance”) was complemented by inductive codes that emerged from the data (for example, “phonological transfer,” “sense of belonging,” and “teacher digital literacy”), which were then grouped into the five domains. The synthesis is therefore a thematic and narrative synthesis, not a meta-analysis; where individual studies reported quantitative effects, these are presented narratively and attributed to their source rather than statistically pooled.

Reliability

To strengthen reliability, two researchers independently coded 20% of the corpus (10 of the 50 studies). Inter-coder agreement, calculated with Cohen's Kappa, was 0.86, indicating high

¹⁵V. Braun and V. Clarke, *Thematic Analysis: A Practical Guide* (London: SAGE Publications, 2021), 53.

consistency. Coding disagreements were resolved through discussion and, where consensus could not be reached, by a third reviewer. The remaining 80% of studies were coded by one researcher and cross-checked by the second against the agreed codebook. Source triangulation across study types, together with an audit trail of analytic decisions, further supported the trustworthiness of the synthesis.

RESULT AND DISCUSSION

Result

Synthesis of the 50 studies indicates that Arabic speaking development arises from the dynamic interaction of five interrelated domains: linguistic, psychological, socio-cultural and environmental, pedagogical, and technological. These domains are not independent; each conditions and reinforces the others, forming a learning ecology in which an intervention in one domain interacts with conditions in another. The studies were distributed across secondary schools, *madrasah*, *pesantren*, and tertiary Arabic programmes, and the findings below should be read as patterns across these formal settings rather than as estimates for any single level. Table 3 summarises the domains, their constituent sub-factors, representative studies, and the reported direction of influence.

Table 3. Key factors influencing Arabic speaking skills across the five domains

Domain	Representative sub-factors	Representative studies	Reported influence on speaking
Linguistic	Phonological complexity (emphatic consonants; 'ayn, ḥā', qāf); prosody; productive vocabulary; spoken syntax (jumlah ismiyyah / fi'liyyah); fluency-accuracy balance; pronunciation and oral correction	Ryding 2013	L1-L2 phonological and syntactic distance raises initial difficulty; targeted pronunciation and corrective feedback support intelligibility and fluency.
Psychological	Speaking anxiety; fear of negative evaluation; self-efficacy; motivation	Shaharuddin et al. 2024; Al-Qahtani 2023; Horwitz, Horwitz & Cope 1986; MacIntyre & Gardner 1994; Abuhussein et al. 2023	Anxiety correlates negatively with fluency and accuracy; supportive climates and ICT-mediated speaking tasks are reported to lower anxiety in some studies.
Socio-cultural & environmental	Absence of bi'ah lughawiyyah; peer and teacher support; online communities; culturally relevant content	Aqil et al. 2025; Pulungan et al. 2026	Project-based communities and social support increase willingness to communicate and belonging; culturally relevant content strengthens engagement.
Pedagogical	TBLT; PjBL; communicative task design; corrective	Syafitri et al. 2026; Afriati et al. 2025;	Communicative approaches are associated with greater

Domain	Representative sub-factors	Representative studies	Reported influence on speaking
	feedback	Benlaghrissi & Ouahidi 2024	gains in speaking scores and oral participation relative to grammar-translation instruction.
Technological	CALL; MALL; MAPBL; speech-recognition and AI tools	Benlaghrissi & Ouahidi 2024; Puasa et al. 2023; Kukulska-Hulme & Shield 2008; Haq et al. 2024	Mobile and AI-supported practice is reported to expand opportunities and reduce anxiety, but benefits are constrained by digital literacy and infrastructure gaps.

Linguistic Factors

Linguistic demands constitute the most fundamental, and in this corpus the least-researched, layer of difficulty. Phonologically, Arabic poses sounds with no equivalent in many learners' first languages: the emphatic (pharyngealised) consonants /ʕ/, /ḍ/, and /ṭ/, together with /ʿ/ (*ʿayn*), /ħ/ (*ḥāʾ*), and the uvular /q/ (*qāf*). Indonesian speakers, for example, struggle to distinguish the emphatic series, which is absent from the Indonesian phonological system,¹⁶ producing intelligibility problems that surface most clearly in spontaneous speech. Beyond segments, prosody (stress, vowel length, and the rhythmic patterning of connected speech) affects how fluent learners sound even when individual sounds are accurate. At the lexical level, productive (active) vocabulary lags behind receptive vocabulary, so learners often recognise words they cannot yet deploy orally. Syntactically, the flexible alternation between *jumlah ismiyyah* (nominal sentences) and *jumlah fiʿliyyah* (verbal sentences) contrasts with the comparatively rigid Indonesian word order, complicating real-time sentence planning. These demands jointly create a tension between *fluency* and *accuracy*: pushing for fluent output can compromise accuracy, while over-monitoring accuracy can stall fluency. The reviewed studies suggest that systematic pronunciation work and well-timed oral corrective feedback (recasts and prompts that do not interrupt the flow of meaning) help reconcile the two, although Arabic-specific evidence on corrective feedback remains thin and warrants dedicated study.¹⁷

Psychological Factors

Psychologically, speaking anxiety emerges as a primary inhibitor of oral participation. Al-Qahtani's study in *Frontiers in Psychology* reported a significant negative correlation between

¹⁶Ryding, Teaching and Learning Arabic, chap. 2.

¹⁷Ryding, Teaching and Learning Arabic, chap. 4.

speaking anxiety and both fluency and accuracy,¹⁸ echoing the foundational foreign-language anxiety construct and its documented interference with second-language processing. Closely related are learners' self-efficacy and the fear of negative evaluation: where learners expect criticism, they speak less and self-correct more, reducing the very practice that builds proficiency. Intrinsic motivation (often religio-cultural in non-Arab Muslim contexts) appears to buffer these effects by sustaining engagement despite difficulty.

Socio-Cultural and Environmental Factors

Context shapes how much speaking actually happens. The absence of a *bi'ah lughawiyyah*, an immersive Arabic environment, in non-Arab countries is a major obstacle: learners struggle to access authentic exposure outside the classroom, whether through interaction with proficient speakers or Arabic-language media. a qualitative study of Arabic learners found that emotional support from peers and practical support from lecturers significantly boosted students' confidence and willingness to speak Arabic, with a majority of students reporting a noticeable increase in their willingness to speak in class,¹⁹ though language anxiety in formal speaking situations persisted even where social support was strong. Culturally relevant content also belongs in this domain, though its mechanisms (and the distinction between Arab, Islamic, and local registers) are examined in the discussion.

Pedagogical Factors

The pedagogical domain is the most frequently studied. The shift from grammar-translation towards communicative approaches such as TBLT and PjBL is associated with measurable gains in the primary studies. In a quasi-experimental study of secondary-school learners (Madrasah Aliyah Mambaus Shalihin Gresik), the group taught using project-based learning showed clearly greater gains in speaking skills than the control group, alongside a high average increase in learning motivation,²⁰ and complementary work on grammar-translation pedagogy in Arabic education similarly finds that structural, translation-focused instruction leaves limited room for spontaneous oral participation.²¹ These figures come from individual studies and are reported here as indicative rather than as field-wide effects. Technology integration through CALL and Mobile-Assisted Project-Based Learning (MAPBL) is reported to accelerate speaking acquisition while broadening cultural exposure, a point developed in the technological domain below.

¹⁸A. Al-Qahtani, "The Relationship between Speaking Anxiety and Oral Performance among Arabic Learners," *Frontiers in Psychology* 14 (2023): 1173041, <https://doi.org/10.3389/fpsyg.2023.1173041>.

¹⁹Abdurrahman Ahmad Aqil, et al., "Social Support and Arabic Language Fluency: An Analysis of Student Interaction Quality," *Lahjatuna: Jurnal Pendidikan Bahasa Arab* 4, no. 2 (2025): 118-132, <https://doi.org/10.38073/lahjatuna.v4i2.2603>.

²⁰Syafitri et al., "Enhancing Arabic Speaking and Writing Skills," 163-184.

²¹Afriati et al., "Grammar and Translation Methods," 1-8.

Technological Factors

Technology functions as an enabler across the other domains. Platforms based on artificial intelligence, real-time speech analytics, and mobile learning create immersive digital spaces (a virtual *bi'ah lughawiyyah*) where learners can practise speaking with reduced immediate social pressure. the same Moroccan MAPBL study also reported increased learner participation and engagement in speaking tasks compared with conventional or non-mobile project-based approaches,²² and a separate development-and-evaluation study of a CEFR-based mobile gamification app for Arabic speaking found the tool to be pedagogically sound and well-aligned with beginner-level standards, suggesting that mobile, gamified tools can support learners' engagement and confidence in practising Arabic speaking.²³ These benefits are nonetheless conditioned by serious constraints identified in the wider literature, including the digital divide, limited technological infrastructure, and inadequate teacher training, particularly in rural areas,²⁴ which qualify the otherwise positive technological findings.

Read against the research questions, the evidence suggests that technological tools such as CALL and MALL (RQ1) most consistently support participation and anxiety reduction; that culturally relevant content (RQ2) is associated with stronger motivation and engagement; and that communicative pedagogies combined with affective support (RQ3) are the strategies most often linked to reduced speaking anxiety. The patterns most often reported (gains in oral participation associated with communicative pedagogies, improved fluency and confidence associated with mobile-assisted project-based learning, and reduced speaking-anxiety levels under ICT-mediated speaking tasks, as observed among English and Arabic learners²⁵) originate from individual primary studies rather than from a pooled analysis, and should be read as indicative of direction and plausibility, not as generalisable effect sizes for the field.

Discussion

The five-domain synthesis can be interpreted against established theory and against the empirical pattern of the 50 studies themselves. The effectiveness of TBLT and PjBL in enhancing

²²Benlaghrissi and Ouahidi, "Impact of Mobile-Assisted Project-Based Learning," article 22.

²³Baiduri Puasa, Jamaludin Sardi, and Nur Fatiha Mohd Ramli, "I-Kalam: A CEFR-Based Mobile Gamification App for Arabic Speaking Skills," *European Proceedings of Educational Sciences* (EpES 2023): 751-762, <https://doi.org/10.15405/epes.23097.55>.

²⁴Alsadika Ziaul Haq, Muhammad Akmansyah, Erlina Erlina, and Koderi Koderi, "Technology Integration in Arabic Language Learning: A Literature Review on the Effectiveness of E-Learning and Mobile Applications," *Journal of Research in Instructional* 4, no. 2 (2024): 481-494, <https://doi.org/10.30862/jri.v4i2.473>.

²⁵Haya Fayyad Abuhussein, Rania Mohammad Qassrawi, and Sami Shaath, "Utilizing Remote Speaking Tasks for Tackling Foreign Language Anxiety," *Cogent Education* 10, no. 2 (2023): 1-12, <https://doi.org/10.1080/2331186X.2023.2238150>.

speaking fluency aligns with the communicative competence theory of Canale and Swain, which holds that language ability encompasses not only grammatical knowledge but also the capacity to use language appropriately in social contexts.²⁶ Across the corpus, however, studies tended to operationalise “communication” as task completion and fluency rather than as sociolinguistic appropriateness, extending the model into Arabic task design while leaving its sociolinguistic component comparatively under-examined.

From a psychological perspective, the anxiety-reduction findings support Krashen's Affective Filter Hypothesis, which posits that affective factors such as anxiety, motivation, and self-confidence influence second-language acquisition.²⁷ The reported reductions in anxiety through ICT-mediated speaking tasks and the documented prevalence of speaking-specific anxiety are consistent with a lowered affective filter; yet none of the reviewed studies measured the filter construct directly, so the alignment is interpretive rather than confirmatory. The practical implication is the importance of a psychologically safe classroom climate in which errors are treated as part of learning and teachers are trained to give constructive, flow-preserving feedback.

The socio-environmental findings affirm Vygotsky's sociocultural theory, in which cognitive development proceeds through social interaction within the zone of proximal development.²⁸ The peer and lecturer social support documented by Aqil. function as scaffolding for oral production, suggesting that schools should engineer conducive social environments such as online exchanges, Arabic extracurricular activities, and moderated social-media practice. The reviewed evidence here is largely qualitative, which strengthens its ecological validity while limiting claims about magnitude.

The effectiveness of TBLT, PjBL, and technology integration also signals a shift from behaviourist towards constructivist pedagogy, in which knowledge is actively constructed through experience and reflection.²⁹ The clearer speaking-skill gains reported for the project-based learning group in Syafitri et al. are consistent with this view, indicating improvement not only in mechanical accuracy but plausibly in collaboration and planning. Teachers, on this reading, act as designers of meaningful experience rather than sole sources of knowledge, although the corpus rarely isolates which component of PjBL drives the gains. Future studies should address this attribution problem.

²⁶M. Canale and M. Swain, "Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing," *Applied Linguistics* 1, no. 1 (1980): 1-47, <https://doi.org/10.1093/applin/1.1.1>.

²⁷S. D. Krashen, *Principles and Practice in Second Language Acquisition* (Oxford: Pergamon Press, 1982), 43.

²⁸L. S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge: Harvard University Press, 1978), 65.

²⁹J. Piaget, *The Construction of Reality in the Child* (New York: Basic Books, 1954), 32.

The cultural domain warrants a more differentiated reading than the literature sometimes provides. “Arab culture,” “Islamic values,” and the “local contexts” of non-Arab learners are overlapping but distinct categories, and conflating them risks both pedagogical imprecision and cultural essentialism. Much of the integrative motivation reported among Indonesian learners, for instance, is religious rather than ethnonational: a desire to access Qur'anic and devotional sources that is analytically separable from familiarity with contemporary Arab social life. Effective cultural integration therefore distinguishes (a) Arabic-language authentic materials, (b) Islamic value-oriented content, and (c) learners' own local Muslim contexts, and operationalises them through concrete pedagogical forms: authentic texts and media, role-play and communication simulations, intercultural dialogue, and context-based Islamic learning tasks. Findings on the centrality of Arabic speaking within Islamic educational contexts (Pulungan et al.) are broadly consistent with Gardner's distinction between integrative and instrumental motivation,³⁰ but the reviewed evidence suggests the integrative dimension among non-Arab Muslim learners is better described as religio-cultural than as straightforwardly “Arab.”

Technology, finally, operates as a catalyst that accelerates and widens access to speaking practice. MAPBL's synergy of project pedagogy and mobile flexibility aligns with Siemens' connectivism, which foregrounds technology in connecting learning resources and supporting lifelong learning.³¹ Yet the same corpus flags the digital divide and uneven teacher literacy as persistent obstacles (Haq et al.), so investment in teacher training and equitable infrastructure is a precondition for realising technology's potential. Models of technology integration suited to resource-constrained, local contexts remain a priority for further research.

Taken together, these findings point to a holistic, contextual framework that treats the five domains simultaneously rather than in isolation. To address speaking anxiety, teachers can combine relaxation techniques, low-stakes pair work, and mobile applications for independent practice; to raise motivation, they can integrate differentiated cultural content and collaborative projects tied to learners' interests; and institutions can build partnerships with counterparts in Arab contexts for virtual interaction with proficient speakers. The framework is offered as an organising heuristic for design, consistent with the individual studies on which it rests without being reducible to them.

³⁰R. C. Gardner, *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation* (London: Edward Arnold, 1985), 23.

³¹G. Siemens, "Connectivism: A Learning Theory for the Digital Age," *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005): 3-10, http://www.itdl.org/Journal/Jan_05/article01.htm.

Limitations

Several limitations qualify these findings. First, the review drew on four databases; despite their breadth, relevant work in other indexes or in languages other than Arabic, English, and Indonesian may have been missed, raising the possibility of database and language bias. Second, reliance on published, peer-reviewed sources introduces a risk of publication bias, since studies reporting positive intervention effects are more likely to appear in print. Third, the corpus varied in design and quality, and educational contexts ranged from secondary schools to universities, limiting the comparability of findings across levels. Fourth, because the synthesis is thematic and narrative rather than meta-analytic, the quantitative effects reported by individual studies could not be statistically pooled or weighted, and the comparative percentages should be interpreted with corresponding caution. These limitations temper the generalisability of the conclusions and motivate the agenda set out below.

CONCLUSION

This systematic review indicates that the development of Arabic speaking skills in formal education is shaped by the interaction of five domains (linguistic, psychological, socio-cultural and environmental, pedagogical, and technological) rather than by any single factor. Within the reviewed corpus, the pedagogical domain (TBLT and PjBL) and the psychological domain (especially speaking anxiety) were the most frequently examined and the most consistently associated with speaking outcomes, whereas the linguistic domain (phonology, productive vocabulary, and spoken syntax) remained comparatively under-researched. Technology, particularly mobile- and project-based learning, recurs as a promising enabler whose benefits are nonetheless conditioned by teacher digital literacy and infrastructure. These conclusions are offered as evidence-informed tendencies rather than definitive effects, given the thematic (non-meta-analytic) nature of the synthesis and the limitations noted above. The principal gaps that remain open concern the linguistic mechanisms of Arabic oral production, the cultural specificity of motivation among non-Arab Muslim learners, and the contextual modelling of technology integration under resource constraints.

Future research is accordingly recommended to undertake longitudinal, mixed-methods studies across more diverse geographical and cultural contexts, in order to establish stronger causal relationships among the identified factors and to test the generalisability of findings. The development of Arabic-specific speaking-anxiety instruments would sharpen diagnosis and intervention, while design-based studies could model technology integration that is feasible under

local infrastructure limitations. Replication that adheres to PRISMA reporting, and that incorporates meta-analysis where data permit, would further consolidate the evidence base. Interdisciplinary collaboration among specialists in linguistics, educational psychology, learning technology, and Arabic-Islamic studies will enrich perspectives and yield more comprehensive solutions.

REFERENCES

- Abuhussein, Haya Fayyad, et al. "Utilizing Remote Speaking Tasks for Tackling Foreign Language Anxiety." *Cogent Education* 10, no. 2 (2023): 2238150. <https://doi.org/10.1080/2331186X.2023.2238150>.
- Afriati, Intan, et al. "Grammar and Translation Methods in Arabic Language Learning: Theory and Practice." *MADINA: Journal of Islamic Studies* 2, no. 1 (2025): 1–8. <https://doi.org/10.62945/madina.v2i1.741>.
- Al-Qahtani, A. "The Relationship between Speaking Anxiety and Oral Performance among Arabic Learners." *Frontiers in Psychology* 14 (2023): 1173041. <https://doi.org/10.3389/fpsyg.2023.1173041>.
- Aqil, Abdurrahman Ahmad, et al. "Social Support and Arabic Language Fluency: An Analysis of Student Interaction Quality." *Lahjatuna: Jurnal Pendidikan Bahasa Arab* 4, no. 2 (2025): 118–132. <https://doi.org/10.38073/lahjatuna.v4i2.2603>.
- Benlaghrissi, Hassane, and Lachhab Meriem Ouahidi. "The Impact of Mobile-Assisted Project-Based Learning on Developing EFL Students' Speaking Skills." *Smart Learning Environments* 11, no. 1 (2024): 1-30. <https://doi.org/10.1186/s40561-024-00303-y>.
- Braun, V., and V. Clarke. *Thematic Analysis: A Practical Guide*. London: SAGE Publications, 2021.
- Canale, M., and M. Swain. "Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing." *Applied Linguistics* 1, no. 1 (1980): 1–47. <https://doi.org/10.1093/applin/I.1.1>.
- Ellis, Rod. *Task-Based Language Learning and Teaching*. Oxford: Oxford University Press, 2003.
- Gardner, R. C. *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold, 1985.
- Haq, Alsadika Ziaul, et al. "Technology Integration in Arabic Language Learning: A Literature Review on the Effectiveness of E-Learning and Mobile Applications." *Journal of Research in Instructional* 4, no. 2 (2024): 481–494. <https://doi.org/10.30862/jri.v4i2.473>.
- Hong, Quan Nha, et al. "The Mixed Methods Appraisal Tool (MMAT) Version 2018 for Information Professionals and Researchers." *Education for Information* 34, no. 4 (2018): 285–291. <https://doi.org/10.3233/EFI-180221>.
- Horwitz, Elaine K., Michael B. Horwitz, and Joann Cope. "Foreign Language Classroom Anxiety." *The Modern Language Journal* 70, no. 2 (1986): 125–132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>.
- Kitchenham, B., and S. Charters. *Guidelines for Performing Systematic Literature Reviews in Software Engineering*. Keele: Keele University, 2007.

- Krashen, S. D. *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press, 1982.
- Kukulska-Hulme, Agnes, and Lesley Shield. "An Overview of Mobile Assisted Language Learning: From Content Delivery to Supported Collaboration and Interaction." *ReCALL* 20, no. 3 (2008): 271–289. <https://doi.org/10.1017/S0958344008000335>.
- MacIntyre, Peter D., and R. C. Gardner. "The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language." *Language Learning* 44, no. 2 (1994): 283–305. <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>.
- Page, Matthew J., et al. "The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews." *BMJ* 372 (2021): 71. <https://doi.org/10.1136/bmj.n71>.
- Piaget, J. *The Construction of Reality in the Child*. New York: Basic Books, 1954.
- Puasa, Baiduri, Jamaludin Sardi, and Nur Fatiha Mohd Ramli. "I-Kalam: A CEFR-Based Mobile Gamification App for Arabic Speaking Skills." *European Proceedings of Educational Sciences (EpES 2023)*: 751–762. <https://doi.org/10.15405/epes.23097.55>.
- Pulungan, Erka, et al. "Strategies for Developing Arabic Speaking Skills (*Mahārah Kalām*) at Private Islamic Senior High School: A Descriptive Qualitative Study." *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 14, no. 1 (2026): 2768–2777. <https://doi.org/10.24256/ideas.v14i1.10815>.
- Ryding, Karin C. *Teaching and Learning Arabic as a Foreign Language: A Guide for Teachers*. Washington, DC: Georgetown University Press, 2013.
- Shaharuddin, Hanis Najwa, et al. "The Level of Student Anxiety in Arabic Speaking Skills." *International Journal of Research and Innovation in Social Science* 8, no. 8 (2024): 2563–2571. <https://doi.org/10.47772/IJRISS.2024.8080195>.
- Siemens, G. "Connectivism: A Learning Theory for the Digital Age." *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005): 3–10. http://www.itdl.org/Journal/Jan_05/article01.htm.
- Stoller, Fredricka L. "Establishing a Theoretical Foundation for Project-Based Learning in Second and Foreign Language Contexts." In *Project-Based Second and Foreign Language Education*, edited by Gulbahar H. Beckett and Paul C. Miller, 19–40. Greenwich, CT: Information Age Publishing, 2006.
- Syafitri, Nila Sari, et al. "Enhancing Arabic Speaking and Writing Skills through Project-Based Learning." *al Mahāra: Jurnal Pendidikan Bahasa Arab* 12, no. 1 (2026): 163–184. <https://doi.org/10.14421/almahara.2026.0121-09>.
- Vygotsky, L. S. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press, 1978.