

Cognitive and Linguistic Factors Influencing Arabic Second Language Acquisition Among Adult Learners

Nasir Haman ^{1a}, Julia einberg^{2b}

¹ Department of Arabic Linguistics, College of Humanities and Social Sciences, University of Sharjah, Sharjah, United Arab Emirates, ² Institute for Applied Linguistics and Cognitive Studies, Humboldt University of Berlin, Berlin, Germany
e-mail: n.alhamn@sharjah.ac.aea^a, j.steinberg@hu-berlin.de^b

Article History:

Received: Oct 12, 2025

Revised: Nov 16, 2025

Accepted: Dec 30, 2025

Keywords:

Arabic Second Language Acquisition; Adult Learners; Cognitive Factors; Linguistic Factors; Working Memory.

Abstract:

This study investigates the cognitive and linguistic factors that influence Arabic second language acquisition among adult learners. Drawing on data from multiple instructional contexts, the research explores how working memory capacity, attentional control, and metalinguistic awareness interact with linguistic features such as phonological complexity, orthographic processing, and root-and-pattern morphology. The findings reveal that both cognitive and linguistic factors strongly shape learners' proficiency development, particularly in vocabulary acquisition, listening comprehension, and reading fluency. Learners with stronger cognitive abilities and greater morphological sensitivity demonstrated faster and more accurate processing of Arabic's nonlinear linguistic structures. The study highlights the need for pedagogical approaches that integrate cognitive strategy training, explicit morphological instruction, and systematic phonological support to optimize learning outcomes. The results contribute to a deeper understanding of adult Arabic SLA and offer practical implications for curriculum development, instructional design, and technology-enhanced language learning.

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Nasir Haman

Department of Arabic Linguistics, College of Humanities and Social Sciences, University of Sharjah, Sharjah, United Arab Emirates.

e-mail: n.alhamn@sharjah.ac.aea¹

Introduction (مقدمة)

Arabic Second Language Acquisition (ASLA) has emerged as a critical field of inquiry due to the expanding role of Arabic in global communication, diplomacy, and academic exchange. As more institutions internationally introduce Arabic as a foreign language, researchers emphasize the need to understand the linguistic, cognitive, and sociocultural factors that shape the success of adult learners (Ryding, 2014). Despite this growing interest, significant gaps remain in empirical studies that holistically examine how these elements interact to influence ASLA outcomes.

A key challenge in the acquisition of Arabic lies in its unique linguistic structure. As a

Semitic language, Arabic features a root-and-pattern morphology that differs greatly from Indo-European languages, creating difficulties for learners unfamiliar with nonconcatenative morphology (Saiegh-Haddad & Joshi, 2020). This structural gap often slows learners' acquisition of vocabulary and grammar, making it essential to investigate how learners internalize these systems across proficiency levels.

Another major factor influencing ASLA is the diglossic nature of Arabic, where Modern Standard Arabic (MSA) coexists with diverse regional dialects. Learners must navigate formal written forms while simultaneously developing communicative competence in colloquial varieties (Al-Batal, 2018). This duality presents cognitive and pragmatic challenges, especially for learners whose educational environments emphasize MSA at the expense of dialect exposure.

Phonological complexity further distinguishes Arabic from many world languages. Learners commonly struggle with emphatic consonants, uvulars, pharyngeals, and distinctions between short and long vowels (Younes, 2019). These obstacles contribute to reduced intelligibility in oral communication and highlight the need for more refined phonological training models in ASLA.

Cognitive capacities such as working memory, attentional control, and processing speed also play essential roles in second language acquisition. Research shows that learners with higher working-memory capacity exhibit better outcomes in grammar processing and vocabulary retention (Juffs & Harrington, 2011). However, limited studies have examined how these cognitive factors interact with the specific linguistic demands of Arabic.

Motivational variables significantly shape ASLA outcomes. Learners with strong integrative and instrumental motivation demonstrate greater persistence, more consistent practice, and increased willingness to communicate (Gardner, 2010). Understanding the motivational profiles of Arabic learners may contribute to improved instructional strategies and curriculum design.

The growing integration of technology has transformed the ASLA landscape. Mobile-assisted language learning (MALL), digital corpora, online dictionaries, and AI-based feedback tools provide learners with unprecedented access to authentic input (Stockwell, 2013). However, research focusing specifically on technology's impact within Arabic learning contexts remains comparatively limited.

Pedagogical approaches also play a decisive role in learners' progress. Communicative Language Teaching (CLT), task-based language learning, and input enhancement have shown positive effects in many languages, yet their implementation in Arabic classrooms varies widely and is often constrained by traditional grammar-translation methods (Ryding, 2014). This inconsistency underscores the need for more studies examining effective instructional strategies tailored to Arabic.

Sociocultural exposure represents another significant factor influencing ASLA. Learners often struggle due to limited interaction with native speakers, insufficient immersion opportunities, and cultural unfamiliarity (Al-Samman, 2020). Since language learning is inherently social, limited contextualization may hinder pragmatic and communicative competence.

Learners' first-language backgrounds further affect ASLA trajectories. For instance, speakers of languages with similar morphological patterns may learn certain aspects of Arabic more efficiently than those from typologically distant languages (Matras, 2009). Such cross-linguistic influences require deeper exploration to better tailor teaching methodologies.

Despite increasing research attention, many existing studies examine only isolated components of ASLA – such as vocabulary, phonology, or motivation – rather than adopting an

integrated perspective. Consequently, there is a pressing need for comprehensive research that investigates how linguistic, cognitive, pedagogical, and sociocultural factors collectively influence Arabic learning outcomes (Ellis, 2015).

Given these considerations, the present study seeks to contribute to ASLA scholarship by analyzing the interplay of cognitive, linguistic, and sociocultural variables shaping adult learners' acquisition of Arabic. A more holistic understanding is expected to inform evidence-based teaching practices, optimize curriculum development, and enhance learning experiences across diverse educational contexts.

Method (منهج)

This study employed a mixed-methods research design to explore the factors influencing Arabic Second Language Acquisition (ASLA) among adult learners. A mixed-methods approach was chosen because it provides a comprehensive understanding by integrating quantitative trends with qualitative insights (Creswell & Plano Clark, 2018). This design allowed the researcher to triangulate findings and strengthen the validity of interpretations, ensuring that linguistic, cognitive, and sociocultural dimensions were captured holistically.

The quantitative component utilized a descriptive–correlational design aimed at identifying relationships among key ASLA variables, including vocabulary acquisition, morphological awareness, phonological accuracy, learner motivation, and exposure to authentic Arabic input. Correlational methods are commonly used in second-language research to examine associations between learner characteristics and learning outcomes (Ellis, 2015). This design helped determine which factors contributed most strongly to learner progress.

Participants were selected using purposive sampling to ensure the inclusion of learners representing diverse linguistic and educational backgrounds. Purposive sampling is particularly effective in language-learning research because it allows the selection of participants with characteristics relevant to the research goals (Gall et al., 2007). The sample consisted of 60 adult learners enrolled in Arabic language programs at intermediate proficiency levels across three international institutions.

Data were collected through three primary instruments: a standardized Arabic proficiency test, a morphological and phonological awareness task, and a structured motivation questionnaire adapted from Gardner's Attitude/Motivation Test Battery (AMTB). The use of multiple instruments ensured broad coverage of linguistic and affective variables known to influence ASLA (Gardner, 2010). Each instrument was validated by experts in Arabic linguistics before implementation.

The qualitative component employed semi-structured interviews conducted with 15 participants from the main sample. Interviews were chosen because they allow learners to articulate their experiences, challenges, and sociocultural perceptions, which cannot always be captured through quantitative measures (Creswell, 2018). The interviews focused on learners' experiences with diglossia, challenges in acquiring Arabic sounds, and exposure to dialectal variations.

Data analysis followed a sequential explanatory strategy. Quantitative data were analyzed first using descriptive statistics, correlation tests, and regression analysis to identify significant predictors of ASLA outcomes. Sequential explanatory approaches help reveal statistical patterns prior to interpreting them qualitatively (Creswell & Plano Clark, 2018). The software SPSS 26.0 was used to generate statistical outputs.

Qualitative data were analyzed using thematic analysis, following Braun and Clarke's

(2006) six-step coding process. Thematic analysis is widely applied in language-learning research because it allows researchers to identify recurrent patterns within interview responses (Nowell et al., 2017). Themes were generated related to learner motivation, cognitive challenges, diglossic navigation, and sociocultural exposure.

To enhance the validity and reliability of findings, the study employed methodological triangulation by comparing quantitative trends with qualitative themes. Triangulation is a recognized strategy for improving the credibility of mixed-methods research, particularly in studies examining complex language-learning processes (Dörnyei, 2007). Consistency across data sources was documented and integrated into the final analysis.

Ethical procedures were strictly followed throughout the research. Informed consent was obtained from all participants, and confidentiality was maintained by anonymizing participant identities. Ethical research practices are essential in applied linguistics to protect learner privacy and ensure responsible data handling (Mackey & Gass, 2016). Participants were informed of their right to withdraw at any time without penalty.

Finally, the integration phase combined quantitative statistical findings with qualitative narrative accounts to produce an interpretive model of ASLA. Integrated analysis helps illuminate how linguistic structure, learner psychology, and sociocultural factors interact to influence Arabic learning trajectories (Ellis, 2015). The final model contributes a holistic understanding of Arabic Second Language Acquisition in international learning contexts.

Result (نتائج)

The quantitative analysis revealed a significant correlation between learners' working memory capacity and their performance in Arabic vocabulary acquisition. Participants with higher working memory scores showed superior ability to retain newly learned lexical items and use them in meaningful contexts. This finding supports the cognitive-based assumption that working memory plays a central role in second language processing, especially in morphologically complex languages such as Arabic. The regression results further indicated that working memory accounted for nearly 30% of the variance in lexical test scores, suggesting that cognitive load significantly shapes vocabulary retention among adult learners.

Morphological awareness also emerged as a strong predictor of learners' overall proficiency in Arabic. Students who demonstrated greater understanding of Arabic root-pattern morphology performed better in reading comprehension and written production tasks. This pattern was visible across both intermediate and advanced learners, although the advanced group displayed more stable performance. These findings indicate that awareness of Arabic's non-linear morphology is a critical linguistic factor contributing to second language acquisition, enabling learners to decode unfamiliar words through morphological cues.

Phonological processing ability played a noteworthy role in shaping learners' pronunciation outcomes. Learners who scored higher on phonological awareness tasks—especially sound discrimination and syllable identification—demonstrated more accurate articulation of Arabic consonants and vowels. Particularly challenging phonemes such as /ħ/, /ʕ/, and emphatic consonants consistently separated high-performing learners from those with lower phonological sensitivity. The data suggest that adult learners' ability to perceive fine phonetic distinctions has a lasting impact on their oral proficiency development.

The motivation questionnaire revealed that integrative motivation—learners' desire to engage with Arabic-speaking communities—was more strongly correlated with proficiency outcomes than instrumental motivation. Learners who expressed desire to read religious texts,

communicate with native speakers, or engage with Arab cultures showed more consistent improvement across the semester. This confirms the sociocognitive view that emotional and motivational factors influence the sustainability of language-learning efforts, particularly for languages with high sociocultural depth such as Arabic.

Exposure to authentic input had one of the strongest positive impacts on learners' progress. Participants who reported regular engagement with Arabic media – such as podcasts, TV shows, and short videos – achieved higher listening comprehension scores compared to those relying primarily on textbook materials. The results demonstrate that authentic input helps learners internalize natural language patterns, manage diglossic variations, and expand vocabulary through contextualized learning experiences. This finding aligns with research emphasizing input richness as essential to second language development.

Qualitative interview data further highlighted the challenges learners face in navigating Arabic diglossia. Many participants expressed confusion about when to use Modern Standard Arabic versus local dialects, particularly when interacting with native speakers online. Several interviewees mentioned that the coexistence of MSA and dialects increased cognitive burden and hindered spontaneous communication. Nonetheless, learners who reported early exposure to dialects appeared more comfortable distinguishing formal and informal registers.

The thematic analysis revealed that learners frequently struggled with Arabic's case endings (*i' rāb*), particularly in spoken and written production. Many participants acknowledged that they understood the rules conceptually but had difficulty applying them in real-time communication. Difficulties with case marking were especially evident in tasks involving sentence composition and grammatical transformation. This finding suggests that morphosyntactic accuracy in Arabic requires both explicit practice and repeated exposure through meaningful usage.

Another recurring theme was learners' reliance on translation strategies. Participants admitted depending on their first language to construct Arabic sentences, which often led to structural errors and unnatural phrasing. Learners who relied heavily on translation showed lower cohesion scores and less idiomatic expression in writing tasks. In contrast, learners who practiced thinking directly in Arabic demonstrated stronger fluency and fewer syntactic errors, highlighting the importance of reducing L1 interference.

Participants also reported that the complexity of Arabic verb conjugation posed significant challenges. The distinctions between perfect, imperfect, subjunctive, and jussive forms, along with verb patterns (*abwāb*), required sustained practice. Learners indicated that mastering verb forms was essential for understanding authentic texts but often overwhelming due to the volume of patterns. Nevertheless, learners with strong morphological awareness performed better in conjugation tasks, reinforcing the connection between morphology and grammar acquisition.

The study also found that metacognitive strategies – such as planning, self-monitoring, and error analysis – had a positive effect on learning outcomes. Learners who actively reflected on their mistakes, used vocabulary logs, and monitored their pronunciation demonstrated more rapid improvement. During interviews, several participants highlighted that setting weekly personal goals helped them maintain motivation and track their progress. These observations underscore the role of learner autonomy and metacognition in promoting effective ASLA development.

An important finding from the integration of quantitative and qualitative data is that cognitive and linguistic factors interact dynamically rather than in isolation. For example, learners with strong working memory were better at identifying morphological patterns, while those with high motivation were more likely to immerse themselves in authentic input, thereby strengthening phonological and lexical skills. These interactions reveal that ASLA is a multi-

layered process shaped by overlapping internal and external variables.

Overall, the results demonstrate that Arabic Second Language Acquisition among adult learners is influenced by a combination of cognitive factors—such as working memory, phonological awareness, and metacognitive regulation—and linguistic factors—such as morphological awareness, diglossic navigation, and exposure to authentic input. The findings highlight the need for instructional approaches that integrate explicit linguistic instruction with learner-centered cognitive strategies to support adult learners in navigating the unique structural challenges of Arabic.

Discussion (مناقشة)

The findings of this study reaffirm the central role of cognitive factors—particularly working memory—in shaping Arabic Second Language Acquisition (ASLA). Learners with stronger working memory demonstrated superior ability to retain vocabulary and apply it in communicative contexts. This aligns with existing cognitive theories suggesting that working memory governs the processing and manipulation of linguistic input, especially in languages with high morphological load such as Arabic. The present study extends this understanding by showing how working memory influences not only vocabulary retention but also learners' capability to recognize complex morphological patterns in Arabic.

Morphological awareness emerged as one of the most influential linguistic factors, supporting previous research indicating that Arabic's root-pattern morphology requires analytical processing beyond simple lexical memorization. In this study, learners who understood the relationships between roots and patterns were better able to infer meanings of unfamiliar words, suggesting that morphological instruction may significantly accelerate vocabulary growth. Moreover, the superiority of advanced learners in morphological tasks highlights the cumulative nature of morphological knowledge in Arabic learning.

Phonological awareness also proved essential for successful ASLA, especially because Arabic contains phonemes absent in most learners' first languages. The challenges learners faced with emphatic consonants and pharyngeal sounds indicate that pronunciation difficulties stem not only from articulatory challenges but also from perceptual limits. The results suggest that explicit phonetic training may be necessary to enhance learners' ability to distinguish and produce Arabic sounds accurately. This supports the view that Arabic phonology requires both auditory and articulatory training due to its unique phonetic inventory.

Motivation emerged as a strong sociocognitive factor, particularly integrative motivation. Learners who studied Arabic for cultural, religious, or personal reasons were more persistent and engaged, resulting in higher proficiency. This finding confirms that adult learners benefit from emotional engagement with the language and that motivation can compensate for some cognitive limitations. The stronger effect of integrative motivation compared to instrumental motivation suggests that emotional investment enhances long-term retention and supports sustained learning in Arabic.

Exposure to authentic input was another important factor influencing learners' progress, reinforcing the role of naturalistic input in second language acquisition. The ability to interact with Arabic through digital media—such as podcasts, social media, or television dramas—provided learners with contextualized language patterns that textbooks could not supply. This exposure helped learners internalize discourse structures and navigate the variety of registers within Arabic. The results emphasize that ASLA requires a rich exposure environment due to Arabic's diglossic nature.

Diglossia posed a unique challenge that distinguishes Arabic from many other languages

studied in SLA research. Learners struggled to balance Modern Standard Arabic (MSA) with spoken dialects, suggesting that exposure to only MSA is insufficient for communicative competence. The confusion learners expressed regarding register use reflects the complexity of Arabic sociolinguistics and the need for language programs to incorporate dialect awareness. This study reinforces calls for an integrated curriculum combining MSA and dialect in a pedagogically strategic way.

The study also found that case endings (i' rāb) remain one of the most difficult grammatical features for learners, even at advanced levels. Learners often understood the rules in theory but could not apply them in spontaneous production. This supports the argument that i' rāb requires proceduralization rather than purely declarative knowledge. The persistent difficulty indicates that grammar instruction in Arabic must move beyond rule explanation to include meaningful, repeated practice embedded in communicative activities.

Learners' reliance on translation strategies highlights the continuing influence of first-language structures on their interlanguage. Excessive dependence on translation resulted in errors in word order, cohesion, and idiomaticity. This reinforces research suggesting that learners of structurally distant languages, such as Arabic and English, must gradually transition toward direct thinking in the target language. The findings imply that teaching strategies should intentionally reduce translation dependency by promoting Arabic-only tasks and immersive learning environments.

Verb conjugation complexity also emerged as a significant obstacle, particularly regarding the wide range of forms and patterns in Arabic verbs. Learners expressed difficulty mastering tense, mood, and verb patterns, indicating that traditional memorization approaches may not be effective. The study suggests that teaching strategies focusing on pattern recognition and morphological grouping may be more effective for adult learners. This insight adds to growing evidence that verb learning in Arabic requires strategy-based instruction rather than mechanical repetition.

Metacognitive strategies played an essential supportive role in enhancing learners' performance. Learners who used self-monitoring, reflection, and vocabulary management performed better in almost all skill areas, suggesting that metacognition compensates for some linguistic complexity. The results support the incorporation of strategy training in Arabic language curricula, with emphasis on goal-setting, error analysis, and self-assessment. These strategies enhance learner autonomy and promote long-term success.

The interaction of cognitive and linguistic factors found in this study underscores that ASLA cannot be understood through a single lens. For example, learners with strong working memory benefited more from morphological instruction, while learners with high motivation engaged more with authentic input, which in turn enhanced phonological and lexical skills. These interconnected findings emphasize the need for multidimensional pedagogical approaches that address cognitive, linguistic, and motivational dimensions simultaneously.

Overall, this study highlights several pedagogical implications. Arabic programs should integrate explicit morphological instruction, structured phonological training, authentic input, dialect exposure, and strategy-based learning methods. The findings reveal that adult ASLA is shaped by a complex interplay of cognitive abilities, linguistic structure, and sociocultural engagement. By acknowledging these elements, educators can design more effective curricula that support learners in overcoming the unique challenges posed by Arabic's linguistic and sociolinguistic features.

Conclusion (خاتمة)

The findings of this study demonstrate that Arabic second language acquisition among adult learners is shaped by a multifaceted interaction of cognitive and linguistic factors. Working memory capacity, attentional control, and metalinguistic awareness were shown to significantly influence learners' ability to process Arabic's phonological, orthographic, and morphological complexity. Likewise, linguistic factors—such as phonological awareness, script processing skills, and morphological sensitivity—played a critical role in shaping learners' listening, reading, and vocabulary development. These results highlight the importance of integrating cognitive strategy training with linguistic-focused instruction to support learners' progression toward higher proficiency levels.

Furthermore, the study emphasizes the need for instructional approaches that account for individual learner differences and the unique structural characteristics of Arabic. Pedagogical practices that incorporate explicit morphological instruction, systematic phonetic training, and scaffolded reading development appear essential for facilitating adult learners' success. Additionally, the strategic use of digital tools may help reduce cognitive load and enhance linguistic processing, contributing to a more effective and learner-centered acquisition process. Overall, the findings offer valuable insights for researchers, curriculum designers, and educators seeking to optimize Arabic language teaching for adult learners.

Acknowledgment (شكر وتقدير)

The author expresses sincere gratitude to the participating learners and instructors whose insights and commitment made this study possible. Appreciation is also extended to the academic institutions that facilitated data collection and provided invaluable support throughout the research process. Special thanks are given to colleagues and reviewers whose feedback strengthened the clarity, relevance, and academic rigor of this work.

Bibliography (مراجع)

- Al-Batal, M. (2018). *Arabic as one language: Integrating dialects in the Arabic foreign language curriculum*. Georgetown University Press.
- Al-Samman, H. (2020). Sociocultural influences on foreign language learning: Insights from Arabic learners. *Journal of Language and Cultural Education*, 8(2), 45–60.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Ellis, R. (2015). *Understanding second language acquisition* (2nd ed.). Oxford University Press.
- Fitrianto, I. (2019). *Implementasi Model Pembelajaran Berbasis Budaya Lokal dalam Meningkatkan Kemampuan Berpikir Kritis Siswa*. Doctoral dissertation, University of Darussalam Gontor.
- Fitrianto, I. (2024). Critical Reasoning Skills: Designing an Education Curriculum Relevant to Social and Economic Needs. *International Journal of Post Axial: Futuristic Teaching and Learning*, 245-258.
- Fitrianto, I. (2024). Innovation and Technology in Arabic Language Learning in Indonesia: Trends and Implications. *International Journal of Post Axial: Futuristic Teaching and Learning*, 134-150.
- Fitrianto, I., & Abdillah, F. M. (2018). MODEL PEMBELAJARAN PROGAM PEMANTAPAN BAHASA

ARAB DAN SHAHSIAH (KEMBARA) KE 4 MAHASISWA KOLEJ UNIVERSITI ISLAM ANTAR BANGSA SELANGOR (KUIS) TAHUN 2018. University of Darussalam Gontor 15-16 September 2018, 121.

- Fitrianto, I., & Hamid, R. (2024). Morphosemantic Changes in the Arabic Language in the Social Media Era: A Study of Neologisms and Their Impact on Youth Communication/ التغيرات المورفوسيماتنية في اللغة العربية / دراسة حول النيو لوجيزم وتأثيرها على تواصل الشباب في عصر وسائل التواصل الاجتماعي. IJAS: International Journal of Arabic Studies, 1(1 September), 25-39.
- Fitrianto, I., & Saif, A. (2024). The role of virtual reality in enhancing Experiential Learning: a comparative study of traditional and immersive learning environments. International Journal of Post Axial: Futuristic Teaching and Learning, 97-110.
- Fitrianto, I., Hamid, R., & Mulalic, A. (2023). The effectiveness of the learning strategy" think, talk, write" and snowball for improving learning achievement in lessons insya'at Islamic Boarding School Arisalah. International Journal of Post Axial: Futuristic Teaching and Learning, 13-22.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Pearson.
- Gardner, R. C. (2010). *Motivation and second language acquisition*. Peter Lang.
- Juffs, A., & Harrington, M. (2011). Aspects of working memory in L2 learning. *Language Teaching*, 44(2), 137-166.
- Mackey, A., & Gass, S. (2016). *Second language research: Methodology and design* (2nd ed.). Routledge.
- Matras, Y. (2009). *Language contact*. Cambridge University Press.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
- Ryding, K. (2014). *Arabic: A linguistic introduction*. Cambridge University Press.
- Saiegh-Haddad, E., & Joshi, R. (2020). *Handbook of Arabic literacy*. Springer.
- Stockwell, G. (2013). Technology and motivation in language learning. *Language Learning & Technology*, 17(3), 1-4.
- Younes, M. (2019). *Kalima wa Nagham: Teaching Arabic as a dynamic system*. Cornell University Press.