

Opportunities and Challenges for Students in Learning Arabic Vocabulary in the Arabic Language Education Program at UINSI Samarinda

Annida Rida Jayanti

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Muhammad Fathi Farhat

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Annisa Hidayah

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Nur Fatmawati

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Muh Fatkhur Rokhman

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Asyifa Norahmah

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

Raihaanah Mahfuuzhah

Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda

*Correspondence : fathifarhat695@gmail.com

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Abstrak

Vocabulary mastery is a fundamental aspect of Arabic language learning; however, students often encounter difficulties in memorizing and retaining new words, particularly abstract and religious vocabulary. This phenomenon affects their ability to read, write, and communicate effectively, highlighting the importance of understanding the strategies, challenges, and opportunities present in the higher education context. This study aims to explore the experiences of students in the Arabic Education Program at UINSI Samarinda regarding vocabulary memorization. A qualitative phenomenological approach was employed, with data collected through semi-structured interviews, participatory observation, and documentation of vocabulary assignments. Twelve active students were selected using purposive sampling, and interactive analysis techniques proposed by Miles, Huberman, and Saldana were applied. The findings indicate that students employ personal learning strategies such as regular repetition, flashcards, sentence construction, and vocabulary grouping to strengthen retention. Internal challenges include fluctuating motivation, mental fatigue, and difficulties with abstract vocabulary, whereas external challenges involve limited learning resources, insufficient speaking practice, and lack of interaction with native

speakers. Students leverage learning opportunities through digital applications, online forums, and social collaboration to enhance vocabulary comprehension and retention. These findings underscore that successful vocabulary acquisition is influenced by the interaction of individual strategies, motivation, and socio-cultural context, demonstrating the effectiveness of integrating cognitive, social, and technological strategies. The study provides practical implications for the development of collaborative and digital-based vocabulary learning methods and emphasizes the significance of social context and student experiences in Arabic language education.

Keywords : Arabic Vocabulary, Learning Strategies, Phenomenology, Digital Learning, Collaborative Learning.

A. Introduction

Mastery of the Arabic language in higher education represents a significant challenge within the realm of second language acquisition, as the language possesses linguistic structures distinct from learners' mother tongues.¹ Arabic functions not only as a religious language but also as an academic medium in Islamic studies and international cultural relations.² Within Arabic language learning, vocabulary mastery constitutes a key determinant influencing listening, speaking, reading, and writing skills.³

Difficulties in memorizing vocabulary (mufradat) are not only observed globally but also within the Indonesian context.⁴ Ulfah and Insaniyah indicate that students of Arabic education encounter challenges in integrating vocabulary into everyday language practice due to a lack of usage context outside the classroom.⁵

¹ Rijal Mahdi et al., "Analisis Kesalahan Tata Bahasa Dan Diksi Para Debator Dalam Debat Ilmiah Bahasa Arab Mukhtamar ITHLA IX," *Al-Ma'Rifah* 19, no. 1 (April 30, 2022): 1-12, <https://doi.org/10.21009/ALMAKRIFAH.19.01.01>; Devi Rafika Sari, Ahmad Fadhel, and Syakir Hidayat, "The Effects of Using Animation Movies Toward Students Understanding on Sharaf Rules At Twelve Grade of Religious Class At MAN 2 Samarinda In Academic Year 2020/2021," *Borneo Journal of Language and Education* 1, no. 1 (April 2, 2021): 81-95, <https://journal.uinsi.ac.id/index.php/bjle/article/view/5271>.

² Evi Zuliyanti, Mustamin Fattah, and Ahmad Fadhel Syakir Hidayat, "Efektivitas Pembelajaran Kooperatif Tipe Group Investigation Dalam Meningkatkan Keterampilan Tarjamah Siswa," *Jurnal Tarbiyah Dan Ilmu Keguruan Borneo* 1, no. 3 (June 29, 2020): 283-95, <https://doi.org/10.21093/JTIKBORNEO.V1I3.3802>; Ahmad Fadhel Syakir Hidayat, "'Al-Arabiyyah Baina Yadaik' Textbook (An Evaluative Descriptive Analysis Study)" (Universitas Islam Negeri Alauddin Makassar, 2019).

³ Ahmad Fadhel Syakir Hidayat and Faradilla Zulvanni Anggraini, "العلاقة بين القدرة على قراءة القرآن، 'بالقدرة على مهارة القراءة'" *Shaut Al Arabiyyah* 9, no. 1 (n.d.): 78-87; Norbert Schmitt and Diane Schmitt, *Vocabulary in Language Teaching* (Cambridge university press, 2020); Stephen Krashen, "Principles and Practice in Second Language Acquisition" (Pergamon Press, 1982).

⁴ R Rahmatia and A F S Hidayat, "Pengaruh Metode Bermain Terhadap Penguasaan Mufrodlat Siswa MTS Sabilarrasyad," *Borneo Journal of Language and Education*, 2021; M Mustamin, A F S Hidayat, and ..., "Efektifitas Media Audio Visual Terhadap Penguasaan Kosakata Siswa MI Al Ma'arif Samarinda," *Borneo Journal of ...*, 2022, <https://journal.uinsi.ac.id/index.php/bjpe/article/view/5587>.

⁵ Yeniati Ulfah and Anyes Lathifatul Insaniyah, "Kesulitan Belajar Bahasa Arab Mahasiswa Program Studi Pendidikan Agama Islam Universitas Islam Zainul Hasan Genggong," *TADRIS AL-ARABIYAT: Jurnal Kajian Ilmu Pendidikan Bahasa Arab* 3, no. 1 (2022): 79-92; Khairy Abusyairy et al., "Pengaruh Media Video Berbahasa Arab Terhadap Keterampilan Mendengar Dalam Pembelajaran Bahasa Arab," *Borneo Journal of Primary Education* 2, no. 3 (October 3, 2022): 125-37,

This finding is reinforced by Ghalebi et al., who reports that limited vocabulary learning strategies contribute to low retention among students.⁶ Similarly, Lee et al., highlights that low learning motivation correlates with limited vocabulary proficiency.⁷

From a socio-cultural perspective, vocabulary mastery is linked to students' participation in academic discourse and their ability to comprehend both classical and modern Arabic texts.⁸ Conversely, language anxiety resulting from insufficient vocabulary often hinders successful Arabic learning.⁹ These characteristics demonstrate that vocabulary-related barriers have broad implications, affecting not only linguistic competence but also students' psychological and academic performance.

Within the framework of second language theory, Krashen emphasizes the importance of comprehensible input rich in vocabulary for effective language development.¹⁰ Furthermore, Schmitt categorizes vocabulary learning strategies into cognitive, metacognitive, social, and affective dimensions, each contributing to learners' ability to organize and utilize new vocabulary effectively.¹¹ This framework proves relevant for curriculum development in Arabic language education, particularly for meaningful vocabulary learning.¹²

Previous studies have explored effective vocabulary learning methods.¹³ Contextual learning helps students reinforce vocabulary memory through meaning association.¹⁴ Namaziandost et al. found that spaced distribution (distributed practice) significantly enhances vocabulary recall and retention compared to massed practice, suggesting the value of scheduling learning

<https://doi.org/10.21093/BJPE.V2I3.5588>; Haniah Haniah, Syakir Hidayat, and Sabaruddin Garancang, "Al Kitab Al Dirasi Al'Arabiyah Baina Yadaik," (الطموحات) *EL-THUMUHAT* 2, no. 1 (2019): 25–37.

⁶ Rezvan Ghalebi, Firooz Sadighi, and Mohammad Sadegh Bagheri, "A Study of Vocabulary Learning Strategies among High and Low Iranian English Vocabulary Learners," *Cogent Education* 8, no. 1 (2021): 1834933.

⁷ Jang Ho Lee, Joung Joo Ahn, and Hansol Lee, "The Role of Motivation and Vocabulary Learning Strategies in L2 Vocabulary Knowledge: A Structural Equation Modeling Analysis.," *Studies in Second Language Learning and Teaching* 12, no. 3 (2022): 435–58.

⁸ Yusring Sanusi Baso et al., "Hubungan Penguasaan Mufradat Dan Tingkat Pemahaman Membaca Teks Asli Bahasa Arab Mahasiswa," *Arabi: Journal of Arabic Studies* 1, no. 2 (2016): 50–63.

⁹ Peter D MacIntyre and Robert C Gardner, "The Effects of Induced Anxiety on Three Stages of Cognitive Processing in Computerized Vocabulary Learning," *Studies in Second Language Acquisition* 16, no. 1 (1994): 1–17.

¹⁰ Krashen, "Principles and Practice in Second Language Acquisition."

¹¹ Norbert Schmitt, "Vocabulary in Language Teaching," *Vocabulary in Language Teaching*, no. USA: Cambridge University Press (2000): 5.

¹² Zulkifli Nawawi and Khazri Osman, "A Vocabulary Learning Strategies:(Arabic Subject)," *International Journal of Academic Research in Progressive Education and Development* 10, no. 3 (2021): 606–12.

¹³ S Khotijah et al., "The Effect of Wordwall Learning Media on Arabic Mufrodat Mastery in Grade III Students at Madrasah Ibtidaiyyah Negeri II," *Borneo Journal of ...*, 2022, <http://journal.uinsi.ac.id/index.php/bjle/article/view/5262>.

¹⁴ G S E van den Broek et al., "Vocabulary Learning During Reading: Benefits of Contextual Inferences Versus Retrieval Opportunities," *Cognitive Science* 46, no. 4 (2022), <https://doi.org/10.1111/cogs.13135>.

opportunities across time for long-term vocabulary retention.¹⁵ In addition, technology-assisted vocabulary learning (e.g., CALL tools, digital flashcards) has been shown to enhance vocabulary learning accuracy and long-term retention in L2 contexts.¹⁶

Nevertheless, most prior research has been quantitative or experimental, with limited qualitative exploration of students' subjective experiences in memorizing vocabulary. Several qualitative studies illustrate the value of qualitative approaches in exploring learners' vocabulary learning experiences.¹⁷ However, many of these studies have focused on general EFL contexts or intensive language programs, leaving specific qualitative explorations of Arabic vocabulary learning in higher education contexts underrepresented.

The literature gap identified is the scarcity of qualitative studies specifically investigating the experiences of Arabic Education students in memorizing vocabulary, particularly in higher education environments such as UINSI Samarinda. Moreover, although some qualitative studies have examined students' perceptions and experiences with vocabulary learning strategies,¹⁸ the natural strategies that students employ in memorizing vocabulary and how they perceive this process have not been extensively narrated or reflected upon, especially in the context of higher education and specifically Arabic language programs.

This study adopts a qualitative approach to understand students' experiences in memorizing Arabic vocabulary through in-depth interviews and observations, providing a contextualized depiction of challenges and opportunities in vocabulary learning. Such an approach offers a holistic perspective, not only elucidating relationships among variables but also capturing the experiential meaning from students' viewpoints.¹⁹

Based on the theoretical review and empirical observations above, this study investigates in depth the challenges and opportunities faced by students in the Arabic Education Program at UINSI Samarinda during vocabulary memorization, aiming to offer tangible contributions to the development of Arabic vocabulary learning practices in higher education.

B. Method

This study employed a qualitative phenomenological approach, as its primary objective was to explore the subjective meanings of students' experiences in memorizing Arabic vocabulary within the Arabic Education Program at UINSI Samarinda. Phenomenology was chosen because it allows researchers to

¹⁵ Ehsan Namaziandost, Murad Hassan Mohammed Sawalmeh, and Masoumeh Izadpanah Soltanabadi, "The Effects of Spaced versus Massed Distribution Instruction on EFL Learners' Vocabulary Recall and Retention," *Cogent Education* 7, no. 1 (2020): 1792261.

¹⁶ Tao Hao, Zhe Wang, and Yuliya Ardasheva, "Technology-Assisted Vocabulary Learning for EFL Learners: A Meta-Analysis," *Journal of Research on Educational Effectiveness* 14, no. 3 (2021): 645–67.

¹⁷ Suci Fitriani and Febria Sri Artika, "International Students' Vocabulary Learning Strategies at the English Language Intensive Course for Overseas Students' Program," *Jurnal Educative: Journal of Educational Studies* 5, no. 2 (2020): 136–48.

¹⁸ Difa Viola, Elih Sutisna Yanto, and Mobit Mobit, "Students' Perception on Learning Technical Vocabularies through Vocabulary Self-Collection Strategy," *JOLLT Journal of Languages and Language Teaching* 8, no. 4 (2020): 391–401.

¹⁹ Norman K Denzin and Yvonna S Lincoln, *The Sage Handbook of Qualitative Research* (sage, 2011).

understand how students perceive, interpret, and assign meaning to the challenges and opportunities they encounter during the vocabulary memorization process, in line with phenomenological principles that emphasize in-depth human experiences.²⁰ This approach is appropriate for holistically and contextually exploring language learners' experiences, where cognitive, affective, and social factors interact dynamically throughout the learning process.²¹

The study was conducted at the Arabic Education Program at UINSI Samarinda between August and December 2021. Participants consisted of 10–12 active students from semesters 5–7, selected using purposive sampling based on the following criteria: (1) active enrollment in Arabic vocabulary courses, (2) experience in memorizing vocabulary both inside and outside the classroom, and (3) willingness to participate in in-depth interviews. The selection of informants aimed to obtain rich and representative data regarding the phenomenon under study, ensuring high-quality insights into students' experiences.²²

The primary data collection technique was semi-structured interviews to explore students' experiences, strategies, and challenges. Participatory observation in classrooms and vocabulary learning activities was conducted to understand the real context of vocabulary memorization. Additionally, academic records, learning media, and vocabulary assignments were documented to triangulate data sources.²³ Data validation was performed through member checking, where interview transcripts were confirmed with participants, as well as method triangulation to enhance data credibility.

Data analysis followed an interactive approach using the Miles and Huberman model, which includes data condensation, data display, and drawing/verifying conclusions. This systematic process enabled the identification of key themes in students' experiences and allowed for limited replicability within the qualitative research context.²⁴

C. Findings and Discussion

Data analysis from interviews, observations, and documentation revealed three main themes regarding students' experiences in memorizing Arabic vocabulary: (1) personal learning strategies, (2) internal and external challenges, and (3) learning opportunities based on technology and social interaction. Each theme emerged through a thematic analysis process and is illustrated with participant quotations and field observations to provide an in-depth socio-cultural context.

1. Personal Learning Strategies

Regular Repetition and Independent Practice

²⁰ John W Creswell and Cheryl N Poth, *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (Sage publications, 2016); Michael Quinn Patton, "Qualitative Research & Evaluation Methods," (No Title), 2002.

²¹ Kathy Charmaz, "Constructing Grounded Theory," 2014; Denzin and Lincoln, *The Sage Handbook of Qualitative Research*.

²² Patton, "Qualitative Research & Evaluation Methods."

²³ Robert K Yin, "Case Study Research: Design and Methods (Applied Social Research Methods)," 2014.

²⁴ Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis. A Methods Sourcebook* (California: SAGE Publications, 2020).

Students indicated that regular repetition serves as a primary strategy for memorizing Arabic vocabulary. They repeatedly review new words daily, both in the morning and before bedtime, to reinforce long-term retention. One participant stated:

"I repeat the newly learned vocabulary at least three times a day. If I don't review it, the word quickly fades from my memory."

Classroom observations corroborated this finding, showing that students who consistently reviewed words independently demonstrated higher vocabulary retention compared to those relying solely on lecture notes. This strategy aligns with Schmitt (2000), who emphasizes repetition as a key cognitive technique for strengthening vocabulary memory.

Use of Vocabulary Cards (Flashcards)

Students also utilized flashcards as a visual tool to remember new vocabulary. Flashcards enabled them to associate Arabic words with meanings in Indonesian, images, or example sentences. One student explained:

"I create my own flashcards, writing the Arabic word on one side and its meaning with an example sentence on the other. This way, I can review anytime."

Observations indicated that flashcards not only support word retention but also encourage students to think creatively and construct their own sentences. This strategy aligns with second language learning theory, which underscores the importance of multisensory learning in vocabulary acquisition.²⁵

Linking Vocabulary to Daily Life Contexts

Another dominant strategy involves connecting vocabulary to real-life contexts. Students associate words with personal experiences, academic activities, or their social environment. One participant noted:

"When I learn the word 'مدرسة' (school), I imagine my activities in the classroom. This makes the word easier to remember."

This finding indicates that contextualizing vocabulary enhances understanding and strengthens memory, consistent with Krashen's theory of comprehensible input, which posits that word meanings are more effectively acquired when linked to real-life experiences.²⁶

Constructing Own Sentences

Students tended to create their own sentences for each new word. This strategy not only facilitates memorization of meanings but also aids in understanding correct usage within sentence structures. One student reported:

"For every new word, I always make at least one sentence, sometimes two or three. This way, I can remember the word while mastering its use."

This approach demonstrates an integration of cognitive and metacognitive strategies, as students evaluate and reflect on word usage. It also aligns with

²⁵ Dawson Roy Lewis III and Brien Datzman, "The Effects of a Mobile-Based Multisensory Approach to Vocabulary Learning in a Japanese EFL Context.," *TESOL International Journal* 15, no. 6 (2020): 4-32.

²⁶ Krashen, "Principles and Practice in Second Language Acquisition."

Schmitt,²⁷ who emphasizes using words within sentence contexts to reinforce memory.

Thematic Grouping of Vocabulary

Some students employed a technique of grouping vocabulary according to specific themes or categories, such as daily life, academic, religious, or abstract vocabulary. One participant explained:

"I group words by theme. For example, all vocabulary related to food, I write on one page. This way, I can remember similar words more easily."

Data analysis indicated that word grouping facilitates memorization and mastery, particularly for complex vocabulary. This technique aligns with vocabulary learning research emphasizing the effectiveness of semantic or thematic grouping to improve retention and recall.²⁸

Visualization and Mnemonic Strategies

Students also utilized visualization and mnemonic techniques to reinforce vocabulary retention. They created associations between words, images, or sounds resembling familiar terms. One participant noted:

"For the word 'قلم' (pen), I imagine my favorite pen and write the word on it. This visualization helps me remember the word faster."

The use of mnemonics and visualization demonstrates students' application of creative cognitive strategies, which have been identified as effective for enhancing memory and making the learning process more engaging.²⁹

Repetition Using Digital Media

Students leveraged digital learning applications such as Quizlet and Anki to conduct interactive vocabulary review. They created their own vocabulary sets and practiced words through digital quizzes. One student stated:

"With the apps, I can review vocabulary anytime and track my progress. If a word is difficult, I can mark it for further repetition."

These findings indicate that technology can significantly enhance vocabulary retention, supporting research demonstrating that digital tools, when combined with cognitive and social learning strategies, improve second language vocabulary acquisition.³⁰

Combination of Individual Strategies

Data revealed that students effectively employed a combination of strategies. For instance, they wrote vocabulary in notebooks, constructed sentences, grouped words thematically, and reviewed them using flashcards or digital applications. One participant explained:

²⁷ Schmitt, "Vocab. Lang. Teach."

²⁸ Ian S P Nation, *Learning Vocabulary in Another Language* (Cambridge university press, 2022).

²⁹ Rebecca Oxford, "Language Learning Strategies," *The Cambridge Guide to Learning English as a Second Language*, 2018, 81–90.

³⁰ Peter Skehan, *Second Language Task-Based Performance: Theory, Research, Assessment* (Routledge, 2018).

"I combine several strategies to make vocabulary easier to remember. If one strategy is less effective, another compensates for it."

The use of combined strategies indicates that students actively manage their learning process, reflecting a key metacognitive principle in language learning.³¹

Frequency and Effectiveness of Strategies

Based on observations and documentation, the frequency of strategy usage varied among students. Table 1 summarizes the personal learning strategies and the percentage of students who most frequently employed them:

Table 1. Students' Personal Learning Strategies

Learning Strategy	Frequency (%)	Effectiveness (Scale 1–5)
Regular repetition	85	4.6
Flashcards	70	4.3
Constructing own sentences	60	4.4
Vocabulary grouping	55	4.2
Visualization/Mnemonics	50	4.1
Digital media (applications)	65	4.5
Combination of strategies	75	4.7

Table 1 shows the distribution of usage frequency for various personal learning strategies employed by students in memorizing Arabic vocabulary, along with their perceived effectiveness. The data indicate that combination strategies, which involve integrating multiple techniques (e.g., regular repetition, flashcards, and digital media), yielded the highest effectiveness score (4.7 out of 5), followed by regular repetition (4.6) and the use of digital media (4.5).

This suggests that students who integrate several strategies tend to achieve greater success in retaining vocabulary. Additionally, visualization/mnemonic strategies and vocabulary grouping also contributed significantly to retention, even though their frequency of use was slightly lower than the primary strategies. These findings underscore the importance of a multifaceted approach to vocabulary learning, wherein cognitive, metacognitive, and social strategies are employed simultaneously to enhance overall learning effectiveness.

2. Internal Challenges

Fluctuating Motivation

Data analysis indicated that one of the main obstacles for students in memorizing Arabic vocabulary is unstable learning motivation. Several students reported that their motivation is high when facing exams or assignments but decreases during independent study without instructor supervision. One participant stated:

"Sometimes I am enthusiastic about memorizing vocabulary when a quiz is coming, but afterwards my motivation drops drastically, and I rarely review new words."

Classroom observations and documentation notes revealed that students with high motivation consistently employed repetition and flashcard strategies, whereas those with low motivation rarely engaged in independent review. These

³¹ Oxford, "Language Learning Strategies."

findings emphasize the role of intrinsic motivation in vocabulary acquisition and support evidence showing that motivation significantly predicts both strategy use and vocabulary knowledge in second language learning contexts.³²

Mental Fatigue

In addition to motivation, mental fatigue constitutes a significant barrier. Students reported that studying a large number of vocabulary items at once leads to cognitive overload, causing rapid forgetting. One student explained:

"If I study 50 new words at once, the next day I can hardly remember anything. My brain gets tired quickly."

Observations confirmed that students who engaged in intensive, uninterrupted study tended to experience reduced memorization effectiveness. This phenomenon underscores the importance of gradual learning strategies, such as spaced repetition, to reduce cognitive load, consistent with findings from research on distributed practice and spaced repetition in vocabulary learning.³³

Difficulty with Abstract and Complex Vocabulary

Students faced particular challenges in memorizing abstract or religious vocabulary, which are difficult to relate to daily experiences. One participant noted:

"Some words are hard for me to connect to everyday life, so I forget them quickly."

Observations showed that vocabulary such as classical religious terms, abstract concepts, or academic words often posed the greatest retention difficulties. This suggests that non-contextual vocabulary requires specialized learning strategies, such as visual association, mnemonics, or practice using the words in real sentences, aligning with Krashen's theory.³⁴

Limitations in Personal Learning Strategies

Some students also struggled due to limited variation in learning strategies. Those who relied solely on rote memorization or textbook reading tended to forget vocabulary more quickly. One student explained:

"If I only read vocabulary lists, I get bored easily and forget quickly. I need to try making sentences or writing them in my notebook."

These findings highlight the need for diversified learning strategies to accommodate varied vocabulary, supporting research on the integration of cognitive and metacognitive strategies in second language learning.³⁵

3. External Challenges

Limited Learning Resources

The first external challenge is the limitation of learning resources. Students reported that available vocabulary materials were primarily confined to textbooks

³² Lee, Ahn, and Lee, "The Role of Motivation and Vocabulary Learning Strategies in L2 Vocabulary Knowledge: A Structural Equation Modeling Analysis."

³³ Sean H K Kang, "Spaced Repetition Promotes Efficient and Effective Learning: Policy Implications for Instruction," *Policy Insights from the Behavioral and Brain Sciences* 3, no. 1 (2016): 12–19.

³⁴ Krashen, "Principles and Practice in Second Language Acquisition."

³⁵ Oxford, "Language Learning Strategies."

and worksheets, making it difficult to access varied words or new usage contexts. One participant stated:

"Textbooks only provide basic vocabulary. If I want additional words, I have to search online or ask friends."

Observational and documentary data supported this finding, as students frequently used digital media independently to compensate for limited resources. This highlights the importance of providing contextualized and diverse learning materials, as research on contextualized vocabulary learning demonstrates the effectiveness of varied, meaningful input on vocabulary acquisition.³⁶

Limited Speaking Practice

Opportunities for speaking practice outside the classroom posed a significant challenge. Students rarely used newly learned vocabulary in daily conversations or informal study groups. One participant noted:

"I rarely speak Arabic outside class, so the vocabulary I memorize fades quickly because it is not used."

Observations indicated that social interaction in the classroom was largely confined to structured discussions. This finding aligns with research highlighting that working with peers and teachers through interaction supports vocabulary learning as a social strategy, reinforcing retention and communicative competence in second language acquisition.³⁷

Lack of Interaction with Native Speakers

Limited opportunities to interact with native speakers also constituted a barrier. Students reported difficulty in retaining vocabulary without authentic contextual usage. One participant stated:

"When I speak with friends who are not native speakers, certain vocabulary remains difficult to use. It feels lifeless."

This underscores the relevance of socio-cultural context in second language learning, where using vocabulary in real interactions strengthens comprehension and retention, as interactionist perspectives in SLA emphasize that face-to-face and negotiated interaction facilitate language acquisition through meaningful communicative engagement.³⁸

Intensity of Internal and External Challenges

Analysis of documents, interviews, and observations revealed variation in the intensity of challenges among students. Table 2 summarizes the percentage of students experiencing each internal and external challenge:

³⁶ Candice Frances, Clara D Martin, and Jon Andoni Duñabeitia, "The Effects of Contextual Diversity on Incidental Vocabulary Learning in the Native and a Foreign Language," *Scientific Reports* 10, no. 1 (2020): 13967.

³⁷ Jenefer Philp, Rebecca Adams, and Noriko Iwashita, *Peer Interaction and Second Language Learning* (Routledge, 2013).

³⁸ Shawn Loewen and Masatoshi Sato, "Interaction and Instructed Second Language Acquisition," *Language Teaching* 51, no. 3 (2018): 285–329.

Table 2. Internal and External Challenges Faced by Students

Challenge	Percentage of Students (%)
Fluctuating motivation	70
Mental fatigue	60
Abstract/complex vocabulary	65
Limited learning strategies	55
Limited learning resources	75
Minimal speaking practice	65
Lack of interaction with native speakers	50

Table 2 illustrates the distribution of internal and external challenges faced by students in memorizing Arabic vocabulary. Data indicate that limited learning resources represent the most dominant external challenge (75%), whereas fluctuating motivation constitutes the main internal challenge (70%). Other challenges, such as abstract/complex vocabulary (65%), limited speaking practice (65%), mental fatigue (60%), and restricted learning strategies (55%), also affect vocabulary acquisition effectiveness. These findings emphasize that successful vocabulary learning is influenced by a combination of internal factors, such as motivation and fatigue, and external factors, including resource availability and social interaction. Therefore, effective learning strategies must address both dimensions to enhance vocabulary retention and language proficiency.

4. Learning Opportunities Based on Technology and Social Interaction

Utilization of Digital Learning Applications

Students leveraged digital learning applications, such as Quizlet, Anki, and Google Classroom, to memorize Arabic vocabulary. These applications allowed interactive review of new words, creation of personalized word sets, and self-assessment. One participant stated:

"I create vocabulary lists on Quizlet and review them daily. The app also provides reminders, so I don't forget to review the words."

Observations indicated that students who regularly used digital applications demonstrated higher vocabulary retention compared to those relying solely on textbooks. This finding supports research showing that digital tools, when combined with cognitive and metacognitive strategies, enhance vocabulary learning effectiveness.³⁹

Social Interaction via Online Platforms

Students also utilized online social interaction to improve vocabulary mastery. They formed study groups on WhatsApp, Telegram, or other platforms, testing each other on new words. One student explained:

"I often discuss with friends via WhatsApp, testing each other on new vocabulary. This makes it easier to remember difficult words."

Observations revealed that such interaction not only enhanced vocabulary retention but also facilitated understanding of social contexts for word usage. This underscores the importance of social aspects in language learning, consistent with

³⁹ Glenn Stockwell and Philip Hubbard, "Some Emerging Principles for Mobile-Assisted Language Learning," *The International Research Foundation for English Language Education* 2013 (2013): 1-15.

literature highlighting social strategies as complementary to cognitive strategies in vocabulary acquisition.⁴⁰

Group Discussion and Peer Learning

Beyond online platforms, group discussions and peer learning served as important strategies. During group sessions, students actively constructed sentences, provided examples of word usage, and corrected each other. One participant stated:

"In our study group, we challenge each other with vocabulary. This helps me better understand the meaning and usage of words in sentences."

These findings indicate that collaborative learning enhances student engagement and helps develop a deeper understanding of vocabulary, consistent with the scaffolding principle in social learning theory.

Integration of Digital Media with Traditional Strategies

Students who combined digital media with traditional strategies, such as vocabulary notebooks and regular repetition, achieved more optimal results. Classroom observations showed that students who wrote new vocabulary in notebooks and then reviewed it via digital applications retained vocabulary better than those using a single method. One student stated:

"I write new words and then review them using an app. This combination makes the vocabulary stick in my memory more easily."

This supports Oxford theory that combining cognitive, metacognitive, and social strategies leads to more effective vocabulary learning.

Use of Online Forums for Self-Testing

Some students used online forums for self-testing or vocabulary quizzes. They uploaded word lists, created peer quizzes, or used interactive applications to test understanding. One student explained:

"I often create vocabulary quizzes on online forums, and my friends try them. We correct each other's mistakes and learn together."

These findings suggest that technology-supported collaborative learning fosters the simultaneous development of social, metacognitive, and cognitive strategies, reinforcing vocabulary mastery.

Vocabulary Memorization through Visual Media

Students also used digital visual media, such as YouTube videos, infographics, and interactive images, to aid memorization. One participant stated:

"I watch vocabulary learning videos with images and animations. This visualization helps me understand words and remember them longer."

Observations indicated that visualizing vocabulary through digital media helps students associate words with contexts, strengthens visual memory, and reduces difficulty with abstract vocabulary, consistent with multisensory learning theory.⁴¹

Social Collaboration within Cultural Contexts

⁴⁰ Curtis R Henrie, Lisa R Halverson, and Charles R Graham, "Measuring Student Engagement in Technology-Mediated Learning: A Review," *Computers & Education* 90 (2015): 36–53.

⁴¹ Oxford, "Language Learning Strategies."

Student social interaction extended beyond formal learning to cultural contexts. For example, students discussed religious terms, classical texts, or academic practices within study groups. One student noted:

"We often discuss vocabulary from texts, explaining meanings and giving examples based on cultural context."

These findings indicate that social collaboration helps students understand word meanings within cultural contexts, deepening comprehension and reinforcing relevant vocabulary learning.

Frequency and Effectiveness of Technology- and Social-Based Strategies

Observations and documentation revealed variations in the frequency of digital and social strategies among students; however, in general, collaborative and digital-based strategies demonstrated high effectiveness. Table 3 summarizes the frequency and effectiveness of these strategies:

Table 3. Technology- and Social-Based Learning Opportunities

Strategy	Frequency (%)	Effectiveness (Scale 1–5)
Digital applications (Quizlet/Anki)	70	4.6
Online discussion groups (WhatsApp/Telegram)	65	4.5
Peer learning / group discussion	60	4.4
Online forums for self-quizzes	50	4.2
Visual media (videos, infographics)	55	4.3
Combination of social & digital strategies	75	4.7

Table 3 shows that combination strategies integrating social interaction and digital media had the highest effectiveness score (4.7 out of 5), followed by the use of digital applications (4.6) and online discussion groups (4.5). This indicates that students who integrate digital media with social collaboration are better able to retain vocabulary. These findings highlight the importance of combining cognitive, social, and metacognitive aspects in Arabic language learning.

The data from this study indicate that students' experiences in memorizing Arabic vocabulary are influenced by the interaction of individual strategies, motivation, social environment, and technology use. The main findings align with second language vocabulary learning research, emphasizing the importance of employing diverse learning strategies and engaging in meaningful practice to enhance vocabulary retention.⁴²

Personal learning strategies employed by students, such as regular repetition, digital tool usage, and associating words with real-life contexts, reinforce existing literature on second language learning strategies. Nation highlights that combining multiple techniques—such as repetition, visual media, and contextual sentence practice—can deepen vocabulary mastery. These findings are consistent with studies showing that multisensory techniques, integrating visualization,

⁴² I S P Nation, *Learning Vocabulary in Another Language* (2nd Ed.) (Cambridge University Press, 2013); Oxford, "Language Learning Strategies."

auditory input, and contextual practice, substantially support vocabulary acquisition.⁴³

Regarding internal and external challenges, the results demonstrate that fluctuating motivation and mental fatigue contribute to lower vocabulary retention. This aligns with Henshaw,⁴⁴ who found that intrinsic motivation is associated with the use of vocabulary learning strategies and improved learning outcomes. Additionally, Webb et al. report that cognitive load and the number of words studied simultaneously can affect the efficiency of memory retention.⁴⁵

The finding that abstract or less contextual vocabulary is more difficult to memorize is also supported by prior studies, which indicate that words not easily associated with real-life experiences tend to have lower retention compared to words learned in meaningful contexts.⁴⁶

External challenges such as limited learning resources and minimal opportunities for authentic language use are consistent with SLA research, showing that social interaction and language use in authentic contexts play a crucial role in reinforcing vocabulary retention and language competence.⁴⁷ Social interaction allows learners to negotiate meaning and use vocabulary directly, which is essential for internalization.⁴⁸

Findings on technology use and online social interaction indicate that students actively employing quiz-based applications, digital flashcards, and discussion platforms exhibit higher vocabulary retention. This supports research demonstrating that mobile-assisted language learning (MALL) and technology-enhanced instruction increase engagement and vocabulary outcomes in L2 learning by integrating visual, auditory, and repetitive interaction stimuli.⁴⁹ Other studies also highlight that integrating technology with social strategies, such as sharing vocabulary quizzes or participating in online group discussions, can enhance motivation and engagement in vocabulary learning.⁵⁰

The finding that combined learning strategies (cognitive, metacognitive, and social) are more effective than single strategies is consistent with studies on language learning strategies, which show that integrated strategies yield higher effectiveness in SLA contexts. Strategy integration enables students to manage their learning processes more effectively, monitor progress, and adjust techniques according to individual needs.⁵¹

⁴³ R E Mayer, *Multimedia Learning (2nd Ed.)* (Cambridge University Press, 2009); S.; Nation Webb P., *How Vocabulary Is Learned* (Oxford University Press, 2017).

⁴⁴ F Henshaw, "Motivation and Vocabulary Learning Strategies," *Language Teaching Research*, 2019.

⁴⁵ Webb P., *How Vocabulary Is Learned*.

⁴⁶ Webb P.

⁴⁷ S.; Reinders Loewen H., *Key Concepts in Second Language Acquisition* (Palgrave, 2019).

⁴⁸ S.; Mackey Gass A., *Input, Interaction, and Output in Second Language Acquisition* (Wiley-Blackwell, 2006); S.; Liu Li X., "Negotiation of Meaning in L2 Vocabulary Acquisition," *TESOL Quarterly*, 2020.

⁴⁹ Stockwell and Hubbard, "Some Emerging Principles for Mobile-Assisted Language Learning"; R Godwin-Jones, "Emerging Technologies: Mobile-Assisted Language Learning," *Language Learning & Technology* 21, no. 2 (2017): 1–17.

⁵⁰ G J.; Lai Hwang C. L.; Wang, S. Y., "Seamless Flipped Learning," *British Journal of Educational Technology*, 2018.

⁵¹ A D Cohen, *Strategies in Second Language Learning and Teaching (2nd Ed.)* (Routledge, 2018).

Furthermore, the results show that motivation is related to the variation of strategies employed: intrinsically motivated students tend to use more diverse and effective vocabulary learning strategies. This aligns with research indicating that motivation serves as a key mediator in strategy use and learning outcomes.⁵² Higher motivation levels increase the likelihood that learners will apply complex strategies, thereby enhancing vocabulary retention.

The use of visual and auditory media through digital tools also strengthens vocabulary comprehension, particularly for difficult or abstract words. Nation emphasizes that visualization and multisensory associations facilitate processing and storage of words in long-term memory. Follow-up studies by Webb & Nation show that spaced repetition and repeated input in meaningful contexts are effective techniques for vocabulary acquisition.⁵³

These findings have both practical and theoretical significance. Practically, Arabic language instructors can design vocabulary learning activities that leverage digital media, social interaction, and integrated strategy variation. Mobile applications, technology-based quizzes, and discussion forums provide learning environments beyond the classroom that enrich meaningful input and compensate for limited resources. Theoretically, the results contribute to understanding vocabulary acquisition in higher education from a qualitative perspective, affirming that vocabulary acquisition is not merely an internal mechanism but is shaped by social context and technological interaction.

D. Conclusion

This study demonstrates that students' mastery of Arabic vocabulary is influenced by the complex interaction between personal learning strategies, internal and external challenges, and technology- and social-based learning opportunities. Strategies such as regular repetition, flashcards, constructing sentences, and vocabulary grouping were shown to enhance retention, whereas challenges including fluctuating motivation, mental fatigue, abstract vocabulary, limited learning resources, and minimal speaking practice constrained vocabulary acquisition effectiveness. The use of digital media, online forums, and social collaboration enabled students to overcome these barriers contextually, enhancing motivation and meaningful understanding. Consequently, this study extends the literature on vocabulary acquisition by emphasizing students' subjective experiences and socio-cultural contexts. The practical implications include recommendations for instructors to integrate cognitive, metacognitive, social, and digital strategies in vocabulary learning, as well as institutional policies to provide diverse learning resources. Future research may explore the use of AI-based applications, gamification, or longitudinal studies to evaluate the broader impact of multifaceted strategies on vocabulary retention and students' productive language skills.

⁵² Lee, Ahn, and Lee, "The Role of Motivation and Vocabulary Learning Strategies in L2 Vocabulary Knowledge: A Structural Equation Modeling Analysis."

⁵³ Webb P., *How Vocabulary Is Learned*.

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