

Exploring Students' Needs for Vocabulary Games in Learning Arabic for Business Purposes

Nor Zahidah Ahmad^{*1}, Wan Marfazila Wan Mahmud¹, Najihah Abd Wahid¹, Fitri Nurul'ain Nordin², Nursafira Ahmad Safian³

¹Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, 21300 Kuala Nerus, Terengganu, Malaysia, ²Academy of Language Studies, Universiti Teknologi MARA, Shah Alam, Malaysia, ³Abdulhamid AbuSulayman Kulliyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Corresponding Authors Email: zahidahahmad@unisza.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i12/27223>

Published Date: 26 December 2025

Abstract

This study was conducted to examine students' needs regarding the use and development of an Arabic vocabulary game for business purposes. The background of this research lies in the growing importance of Arabic as a global business language, especially in trade and commerce involving the Middle East and other Arabic-speaking regions. Despite this, many students still face challenges in mastering business-related vocabulary, which highlights the need for effective learning tools to enhance vocabulary acquisition. The objective of this pilot study is to investigate students' needs for the development of the Arabic vocabulary board game prototype "*I-Mufradaat*," utilizing a vocabulary-based board game as an innovative approach to learning Arabic for business purposes. The research employed a survey design, with data collected through questionnaires administered to 45 undergraduate students in the field of business at Universiti Teknologi MARA (UiTM), Shah Alam. Findings indicate that learners expressed a strong need for engaging and gamified resources to supplement traditional methods, emphasizing motivation, interactivity, and contextual application. The results provide valuable preliminary insights for refining the design and content of *I-Mufradaat*, supporting its potential as an effective gamification-based tool to enhance Arabic vocabulary acquisition among non-native speakers. In conclusion, this study emphasizes the potential of vocabulary games as an innovative and interactive medium for enhancing Arabic learning in business contexts. It also suggests the development of gamified products as practical teaching aids to bridge the gap between students' needs and effective learning strategies.

Keywords: Vocabulary, Learning Arabic, Business Purposes, *I-Mufradaat*

Introduction

Foreign language proficiency is a critical asset in an increasingly globalized economy, shaping professional development, enhancing economic value, and facilitating international trade and business communication. Strategic investment in language education—coupled with systematic cultivation of cultural competence—is increasingly recognised as central to enabling effective participation in globalised economic activity. Language proficiency serves not only as a communicative tool but also as a form of linguistic capital that structures access to international networks and mediates cross-cultural interaction. In parallel, translation services remain indispensable for addressing communicative asymmetries in transnational exchanges and for facilitating the inclusion of small and medium-sized enterprises (SMEs) in global trade ecosystems (Al-Tarawneh, 2025).

While English continues to operate as the dominant lingua franca within international business settings (Kameda, 2014; Roje, 2023), emerging evidence highlights the economic and sociocultural value of other languages, each of which carries distinct potential to broaden trade opportunities and contribute to sustainable economic development (Schroedler, 2018; Grenier, 2023).

Digital technologies and AI can enhance language learning by providing personalized and adaptive learning experiences, improving language proficiency and retention. Mastery of grammatical rules enables individuals to construct structurally accurate sentences, while sufficient vocabulary knowledge facilitates effective communication. Ferreira (2007) asserts that readers must understand approximately 97% of the vocabulary in a given text to achieve adequate comprehension. This implies that for individuals to express themselves clearly and to be understood by others, both interlocutors—the sender and the recipient—must possess a sufficiently robust vocabulary base.

Therefore, this pilot study aims to investigate students' needs and preferences regarding the use and development of a gamified vocabulary learning tool, specifically the "I-Mufradaat" Arabic business vocabulary board game. Using a survey-based design, preliminary data were collected from undergraduate business students at Universiti Teknologi MARA (UiTM), Shah Alam, to identify the motivational, interactive, and functional features required for an effective gamified learning resource. Findings from this study are expected to inform the refinement of gamification-based instructional tools and contribute to narrowing the gap between students' learning needs and the successful acquisition of specialized Arabic vocabulary for business purposes.

Gamification in Learning Vocabulary

Gamification, or gamified learning, has gained significant traction in education, particularly in vocabulary acquisition, which plays a pivotal role in language learning. Vocabulary knowledge forms the foundation for the development of listening, reading, speaking, and writing skills (Cameron, 2001). Consequently, learners' mastery of vocabulary strongly correlates with their overall language proficiency (Meara & Jones, 1987). Conversely, insufficient vocabulary knowledge can hinder the acquisition of other language skills (Al-Khasawneh, 2019).

The integration of gamification into language learning offers a promising solution to address these challenges by transforming traditionally monotonous learning experiences into engaging and enjoyable ones (Kingsley & Grabner-Hagen, 2018). Given its potential benefits, numerous studies have explored the impact of gamification on vocabulary learning. Employing diverse research methodologies, these studies consistently report positive outcomes, including improved learning performance (Chen et al., 2019; Sanosi, 2018; Waluyo & Bucol, 2021), enhanced motivation (Li et al., 2019; Reynolds & Taylor, 2020; Wu, 2018), increased learner interest (Anjaniputra & Salsabila, 2018; Elaish et al., 2019; Wu & Huang, 2017), reduced anxiety (Weissheimer et al., 2019; Zou et al., 2019), and greater learner autonomy (Ebrahimzadeh & Alavi, 2016; Korlu & Mede, 2018; Setiawan & Wiedarti, 2020). Game-based learning is strongly advocated due to its inherent features—such as structured gameplay, interactivity, and engagement—that can motivate learners and facilitate desired learning outcomes (Breien & Wasson, 2021). Therefore, incorporating gamification into vocabulary instruction is particularly beneficial for enhancing language proficiency, especially in the acquisition of a third language.

Vocabulary as a Core Component of Language Learning

Vocabulary constitutes one of the most essential elements of any language system. In Arabic, the terms *kalimah* and *mufradat* refer to a set of words that convey specific meanings. Harun (2014) asserts that a word is formed by a combination of consonantal letters that collectively express meaning. Hambali et al. (2023) further explain that vocabulary mastery involves the ability to pronounce words accurately, comprehend their meanings within appropriate syntactic contexts, recognize morphological patterns and derivations, and construct grammatically complete sentences. Nation (1990) categorizes vocabulary knowledge into three primary dimensions: (i) word form, (ii) word meaning, and (iii) word function or usage. He also identifies nine subcomponents essential for vocabulary learning, encompassing aspects of form, meaning, and use:

1. Spoken form
2. Written form
3. Word structure
4. Association between form and meaning
5. Conceptual meaning
6. Lexical associations with other words
7. Grammatical function
8. Collocations
9. Constraints on comprehension and appropriate usage

Arabic for Business Purposes

According to Hutchinson and Waters (1987), language for specific purposes can be conceptualized as “an approach to language teaching in which all decisions as to content and method are based on the learner’s reason for learning” (p. 19). In this regard, English for Specific Purposes (ESP) refers to English language courses designed for use in a particular field (Wright, 1992). Similarly, Arabic for Specific Purposes (ASP) introduces a new dimension in applied linguistics, where Arabic language instruction adopts a learner-centered approach and employs methodologies tailored to meet learners’ specific needs. Consequently, ASP syllabi often include specialized objectives aimed at fulfilling particular requirements,

enabling learners to use Arabic effectively in defined contexts. ASP courses are therefore oriented toward achieving communicative competence and prioritize learner needs, distinguishing them from Arabic for General Purposes, which lacks such contextual specificity.(Abdul Ghani,2019)

ASP represents a targeted approach to language teaching, where knowledge is transmitted through strategies aligned with learners' goals. This alignment necessitates careful consideration of teaching methods, materials, activities, and language levels to correspond with learners' requirements (Robinson, 1991). Jaafar (2013) identifies three common types of ASP courses: Arabic for Professional Purposes, Arabic for Academic Purposes, and Arabic with Specific Topics. Interestingly, there appears to be minimal distinction between Arabic for academic and professional purposes, as language learned in academic settings often transfers to professional contexts. Conversely, Arabic with Specific Topics places greater emphasis on thematic content, with outcomes determined by prior needs analysis.

Students' Needs and Perception in Learning Arabic for Specific Purposes

Students engaged in learning Arabic for specific purposes (ASP) have distinct needs and perceptions shaped by the specialized nature of their language use. These learners prioritize acquiring vocabulary, phrases, and communication skills that are directly applicable to their professional or academic fields, such as business, diplomacy, tourism, or medicine. A study focusing on the Malaysian context highlights that contemporary learners of Arabic for specific purposes seek more than general language proficiency; they aim to master terminologies and practical language patterns relevant to their particular domains, which enhances their motivation and practical readiness for real-world applications. This aligns with findings that ASP courses are designed to meet specific goals by incorporating authentic, content-based contexts, thereby facilitating faster and more efficient language acquisition tailored to students' needs (Abdul Ghani et. al., 2019).

The perception of students towards learning Arabic for specific purposes is generally positive, especially when the curriculum is clearly linked to their career ambitions. Students appreciate learning environments that incorporate specialized vocabulary and contextualized communication exercises, which boost their confidence and ability to use the language professionally. This perception is vital because a needs-based curriculum that addresses students' expectations results in better engagement and more meaningful learning outcomes. For example, studies reveal that when courses are learner-centered and focus on relevant professional contexts, students show higher motivation and satisfaction, which correlates with improved performance and retention of language skills (Hassan et. al., 2024).

The methodological approaches in ASP courses also reflect the diverse needs of learners. Effective teaching combines audiovisual and multimedia tools with personalized instruction to address varied learning styles and enhance the acquisition of specialized vocabulary. Research underlines the effectiveness of using digital applications, flashcards, and interactive media to support vocabulary learning, especially when these tools connect language to practical tasks. These approaches not only improve students' retention but also

foster active participation and engagement by linking learning materials directly to the skills required in their specific field (Mohamad Yusof et. al., 2022).

Moreover, the integration of needs analysis into the design and delivery of Arabic for specific purposes courses is indispensable. Needs analysis helps identify the exact linguistic competencies students require, allowing instructors to tailor instruction accordingly. This process ensures that teaching methods, materials, and assessments are aligned with the learners' professional and academic objectives. Multiple studies emphasize that a structured approach to needs analysis, including goal setting and learner feedback, enhances the relevance and effectiveness of language instruction, making learners feel their time investment is worthwhile and their skills directly applicable to their intended use of Arabic (Maswani & Umbar, 2024).

In summary, students learning Arabic for specific purposes have unique needs centered around specialized vocabulary and contextual language use. Their positive perceptions of ASP courses hinge on clear relevance to their professional goals and the use of effective, engaging teaching methods supported by needs analysis. Incorporating multimedia and interactive tools further supports their vocabulary acquisition, fostering motivation and practical language skills crucial for success in their fields. This learner-centered approach has become a hallmark of modern ASP teaching, reflecting a growing awareness of the importance of aligning language education with specific professional and academic demands.

Methodology

This study employed a quantitative survey design to investigate undergraduate students' needs in developing an Arabic vocabulary board game for business purposes. A total of 45 business-related undergraduates from Universiti Teknologi MARA (UiTM) Shah Alam participated through convenience sampling, with demographic details such as age, gender, and prior Arabic experience collected for contextual understanding. Data were gathered using a structured questionnaire that examined challenges in learning Arabic vocabulary, preferences for gamified learning, and desired features for the "I-Mufradaat" prototype, using a 5-point Likert scale. Questionnaires were administered during class sessions with voluntary, anonymous participation over a two-week period. Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 27. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to analyze the responses, providing preliminary insights to guide the design of an engaging and contextually relevant Arabic vocabulary board game for business.

Findings and Discussions

This section presents the study's demographics, descriptive analysis results, and discussion regarding students' perception level towards the development of *I-Mufradaat* and the suitability of using *I-Mufradaat* in the learning of Arabic vocabulary.

Table 1

Distribution of Respondents' Demographics Based on Gender and Year of Study

Variable	Item	Number	Total
Gender	Male	14	45
	Female	31	
Year of Study	First Year	27	45
	Second Year	16	
	Third Year	2	

Table 1 shows that out of 45 respondents, the majority were female students (31) compared to male students (14), reflecting the common gender pattern in language related courses where female participation tends to be higher. In terms of year of study, most participants were first-year students (27), followed by second year (16) and a small number of third-year students (2). This indicates that the findings are largely shaped by learners who are still in the early stages of acquiring Arabic for business purposes, which is useful for identifying foundational vocabulary needs for the game development. However, the limited representation of senior students suggests that the perspectives of more advanced learners are less reflected in the results. Overall, these demographics provide important context for interpreting students' needs and preferences in relation to the proposed Arabic vocabulary board game.

Next, the analysis findings in Table 2 present the percentage of students' prior knowledge on Board Game in learning foreign language.

Table 2

Percentage of Students' Prior Knowledge on Board Game

Item	Statements	Percentage of Students' Prior Knowledge	
		(Yes)	(No)
1	Have you ever heard about a Board Game before?	66.7%	33.3%
2	Do you wish to learn Arabic vocabulary through the use of a board game?	93.3%	6.7%

Table 2 presents the percentage of students' prior knowledge and interest in using board games for learning Arabic vocabulary. Findings show that 66.7% of respondents had previously heard of board games, indicating a generally moderate level of familiarity with game-based activities; however, a substantial 33.3% reported no prior exposure, suggesting that a portion of students may require initial guidance or orientation when engaging with board-game-based learning tools. Despite this variation in prior knowledge, students demonstrated a strong inclination toward gamified learning, with 93.3% expressing a desire to learn Arabic vocabulary using a board game. Only 6.7% indicated no interest, showing minimal resistance to the approach. This overwhelmingly positive response highlights high learner readiness and enthusiasm for interactive and engaging learning methods. It also suggests that the development of the proposed Arabic vocabulary board game aligns well with students' preferences and motivational factors, thereby increasing the likelihood of its

acceptance and effectiveness in supporting Arabic language acquisition, particularly within a business context.

Table 3

Students' Perception Level Towards the Development of I-Mufradaat

Item	Statements	Min	S.D
1	I require a board game to support my learning of Arabic vocabulary.	3.4889	.54864
2	I require an interactive learning tool to support my acquisition of Arabic vocabulary.	3.6222	.53466
3	It is difficult for me to master Arabic vocabulary without the support of any learning aids such as a board game.	3.0889	.73306
4	I would like to learn the Arabic language course with the assistance of a Board Game.	3.5111	.50553
5	I feel motivated to learn the Arabic language course through the use of a Board Game.	3.4667	.50452
6	I find it easier to memorise Arabic vocabulary with the assistance of the board game.	3.4889	.66134

Based on the analysis in Table 3, the results indicate that students' perception toward the development of the *I-Mufradaat* is moderately high, ranging from (Min= 3.0889, SD= .73306) for the item ' It is difficult for me to master Arabic vocabulary without the support of any learning aids such as a board game' to (Min=3.6222, SD= .53466) for the item ' I require an interactive learning tool to support my acquisition of Arabic vocabulary'. These findings indicate that the gamification approach is highly effective in enhancing learners' interest, motivation, and engagement. Furthermore, the design and content presentation of the gamified materials demonstrate strong pedagogical relevance for Arabic for Specific Purposes.

Table 4

The Suitability of Using I-Mufradaat in the Learning of Arabic Vocabulary

Item	Statements	Min	S.D
1	To what extent is this product prototype appropriate for learning Arabic vocabulary for Business purposes?	3.4667	.62523
2	Is the design of this product prototype appropriate for implementation during lecture sessions?	3.4000	.68755
3	The development of this board game has the potential to enhance students' interest in improving their mastery of Arabic vocabulary for business purposes.	3.4667	.50452
4	The use of dual languages (Arabic and Malay) in the development of this game enhances learners' understanding of Arabic vocabulary for business purposes.	3.6000	.49543
5	Should digital elements such as QR codes be incorporated into the development of this board game?	3.3556	.60886

Next, the analysis findings in Table 4 present the suitability of using *I-Mufradaat* in the learning of Arabic vocabulary for business purposes.

The results indicate generally positive perceptions of the board game prototype across all evaluated dimensions. Item 1 recorded a mean score of 3.47 (SD = 0.63), suggesting that respondents view the prototype as reasonably appropriate for supporting the learning of Arabic business vocabulary. Similarly, Item 2 yielded a mean of 3.40 (SD = 0.69), demonstrating that participants consider the design moderately suitable for use during lecture sessions. Item 3, which evaluates the prototype's potential to stimulate interest and improve students' mastery of Arabic vocabulary for business purposes, also recorded a favourable mean of 3.47 (SD = 0.50). This suggests a consistent belief in the motivational value of the board game. Notably, Item 4 obtained the highest mean score (M = 3.60, SD = 0.50), indicating strong agreement that the incorporation of dual-language elements (Arabic and Malay) enhances learners' understanding of the targeted vocabulary. Meanwhile, Item 5, concerning the integration of digital components such as QR codes, received a mean of 3.36 (SD = 0.61). Although slightly lower than the other items, the score still reflects positive respondent attitudes, implying openness to the inclusion of digital enhancements to increase the game's interactivity and pedagogical value.

Overall, the findings demonstrate encouraging acceptance of the prototype, with all items receiving mean scores above 3.30, indicating favourable perceptions toward its suitability, design, pedagogical potential, and opportunities for further enhancement.

Additionally, the questionnaire included two open-ended items: Questions 6 ("What additional elements or features would be appropriate to incorporate into the development of this board game?") and 7 ("What is your opinion regarding this board game?"), respondents provided a range of constructive suggestions to enhance the design and pedagogical value of the board game. Among the key recommendations were the inclusion of visual elements such as relevant images, the integration of creative components including fun facts, and the incorporation of Islamic-themed learning materials. Several respondents highlighted that the game was enjoyable and interactive yet noted the need for improvements in design to ensure that the game remains unique and not overly complex.

Additional suggestions included embedding audio features for accurate Arabic pronunciation, using more attractive colours and visuals, and providing a digital version of the game. In conclusion, the majority of respondents agreed that the use of the board game was an engaging and enjoyable learning platform with strong potential to enhance students' interest and motivation in learning Arabic for business purposes.

Conclusion

This study reveals the significant need among business students for innovative and engaging tools to support their acquisition of specialized Arabic vocabulary. Traditional instructional methods often fall short in providing the motivation, interactivity and context necessary for effective vocabulary retention in business Arabic. The introduction of gamification, specifically through the development of the vocabulary board game prototype *I-Mufradaat*, shows strong potential to fulfill these needs by making learning more interactive and contextually relevant. Survey results from undergraduate business students at Universiti

Teknologi MARA (UiTM) suggest a clear demand for gamified learning approaches that supplement conventional teaching, enhancing both student motivation and practical language skills.

Furthermore, this research underscores the importance of a need-based curriculum tailored to the specific language requirements and career goals of learners in the domain of Arabic for specific purposes. Integrating student preferences and feedback into the design of learning tools ensures that instructional approaches are aligned with students' real-world applications, which improves engagement and learning outcomes. The use of multimedia and interactive modules as part of the learning process further supports the development of specialized vocabulary effectively.

In conclusion, vocabulary games such as *I-Mufradaat* have the potential to bridge gaps between student needs and instructional effectiveness in Arabic for business purposes. This pilot study emphasizes the value of gamification in educational settings and offers a foundation for future development of practical, student-centered teaching aids in specialized language learning. It highlights the need for continuous research and refinement of such innovative tools to optimize their impact on learning success and to better prepare students for professional challenges in Arabic-speaking business environments.

Research Contributions

This study makes a significant theoretical and contextual contribution by integrating gamification theory, Bloom's Revised Taxonomy, and Multiple Intelligences Theory into the domain of Arabic language learning for business purposes. The findings empirically support gamification theory by demonstrating that game-based learning environments—specifically vocabulary board games—enhance learner motivation, engagement, and meaningful interaction, which are critical factors in second language acquisition. From the perspective of Bloom's Revised Taxonomy, the *I-Mufradaat* prototype facilitates progressive cognitive development, enabling learners to move beyond basic vocabulary recall toward higher-order skills such as application, analysis, and contextual use of business-related Arabic lexicon. Furthermore, the study aligns with Gardner's Multiple Intelligences Theory by acknowledging learners' diverse cognitive strengths, as the board game format accommodates linguistic, interpersonal, logical-mathematical, and kinesthetic intelligences through collaborative play, problem-solving, and interactive decision-making. Contextually, this research contributes to the underexplored field of Arabic for Business Purposes (ABP) by addressing the pedagogical gap between traditional instruction and learners' needs for practical, contextualized vocabulary acquisition. The study provides empirical evidence to inform the design of gamified instructional tools, positioning *I-Mufradaat* as a theoretically grounded and pedagogically relevant innovation for non-native Arabic learners in higher education.

Acknowledgment

The authors would like to thank the Centre for Excellence Management & Research Incubator (CREIM) Universiti Sultan Zainal Abidin, Terengganu, for the funding of the Dana Penyelidikan Universiti (DPU) (UniSZA/2023/DPU 1.0/43 | RD054).

References

- Abdul Ghani, M. T., Wan Daud, W. A. A., & Ramli, S. (2019). Arabic for Specific Purposes in Malaysia: A Literature Review. *Issues in Language Studies*, 8(1), 1–14.
- Al-Khasawneh, F. (2019). The Impact of Vocabulary Knowledge on The Reading Comprehension of Saudi EFL learners. *Journal of Language and Education*, 5(3), 24-34.
- Al-Tarawneh, A. (2025). Bridging Language Divides: Translation and Its Impact on International Trade Flows. In *Studies in Systems, Decision and Control*, 1021-1031.
- Anjaniputra, A. G., & Salsabila, V. A. (2018). The Merits of Quizlet for Vocabulary Learning at Tertiary Level. *Indonesian EFL Journal*, 4(2), 1-11.
- Breien, F. S., & Wasson, B. (2021). Narrative Categorization in Digital Game-Based Learning: Engagement, Motivation & Learning. *British Journal of Educational Technology*, 52(1), 91-111.
- Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge: Cambridge University Press.
- Chen, C.-M., Liu, H., & Huang, H.-B. (2019). *Effects of A Mobile Game-Based English Vocabulary Learning App on Learners' Perceptions And Learning Performance: A Case Study of Taiwanese EFL Learners*. *ReCALL*, 31(2), 170-188.
- Ebrahimzadeh, M., & Alavi, S. (2016). Motivating EFL Students: E-Learning Enjoyment as A Predictor of Vocabulary Learning Through Digital Video Games. *Cogent Education*, 3(1).
- Elaish. (2019). Development of a Mobile Game Application to Boost Students' Motivation in Learning English Vocabulary. *IEEE Access*, (99):1-1.
- Ferreira, L. (2007). *How To Teach Vocabulary Effectively: An Analysis of the Book Course*.
- Grenier, G., Zhang, W. (2023). Languages, The Labour Market, and Trade. In *The Routledge Handbook of Language Policy and Planning*, 145-157.
- Hambali (2023). *The Implementation of Vocabulary Learning Strategies in Students' Vocabulary Size*. *English Language Teaching Method*, 3 (1).
- Harun, B. (2014). *Strategi Pembelajaran Kosakata Bahasa Arab Pelajar Sekolah Menengah Agama di Malaysia*. University of Malaya.
- Hassan, E. M. E. A., Romli, T. R. M., Ramli, S., & Abdul Ghani, M. T. (2024). The Attitudes of Arabic Language Learners Towards Learning Arabic for Specific Purposes, Kanar 1 Course, Language Institute, International University of Africa (IUA), Sudan. *International Journal of Religion*, 5(10), 5295 – 5308.
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A learning-centered approach*. Cambridge: Cambridge University Press.
- Jaafar, M. N. (2013). Tahlil Hajat Mutakhassisi Al Lughah Al Arabiah Wa Al Ittisalat Bi Jamiah Al Ulum Al Islamiah Al Maliziah Fi Taalum Al Lughah Al Arabiah Li Aghrad Siyahiyah. 4th International Conference of Arabic Language and Literature (ICALL 2013). *Kuala Lumpur: IIUM Press*.
- Kalemkuş, J., & Kalemkuş, F. (2023). Effect of the Use of Augmented Reality Applications on Academic Achievement of Student In Science Education: Meta-Analysis review. *Interactive Learning Environments*, 31 (9), 6017-6034.
- Kameda N. (2014). Japanese Business Discourse of Oneness: A Personal Perspective. *Journal of Business Communication*, 93-113.
- Kingsley, T. L., & Grabner-Hagen, M. M. (2018). Vocabulary by Gamification. *The Reading Teacher*, 71(5), 545-555.
- Korlu, H., & Mede, E. (2018). Autonomy in Vocabulary Learning of Turkish EFL Learners. *The EUROCALL Review*, 26(2), 58-70.

- Kul, H. H., & Berbe, A. (2022). The Effects of Augmented Reality in A 7th-Grade Science Lesson on Students' Academic Achievement and Motivation. *Journal of Science Learning*, 5 (2), 193-203.
- Li, R., Meng, Z., Tian, M., Zhang, Z., & Xiao, W. (2019). Modelling Chinese EFL Learners' Flow Experiences in Digital Game-Based Vocabulary Learning: The Roles of Learner and Contextual Factors. *Computer Assisted Language Learning*, 1-24.
- Maswani & Umbar, K. (2024). Arabic for Specific Purposes (ASP) in Indonesian Context. A Review of the Indonesian Qualifications Framework (IQF). *International Colloquium on Interdisciplinary Islamic Studies (ICIIS) in conjunction with the 6th Annual Postgraduate Conference on Muslim Society (APCoMS)*.
- Meara, P., & Jones, G. (1987). Tests Of Vocabulary Size in English As A Foreign Language. *Polygot*, 8(1), 1-40.
- Mohamad Yusof, M. A., Shafri, M. H., Shaharuddin, N. H., Abd Raup, F. S., & Ismail, N. (2022). The Development of an Integrated Exercise Module for Basic Arabic Language through Mobile Application: A Need Analysis. *International of Academic Research in Business and Social Sciences*, 12(11), 3044-3058.
- Nation, P. (1990). *Teaching and Learning Vocabulary*. New York: Newbury House.
- Robinson, P. C. (1991). *ESP Today: A Practitioner's Guide*. New York: NY: Prentice Hall International.
- Roje R.C.& Bazdan V. (2023). English As A Lingua Franca in Peer-To-Peer-Digital Business: Rapport-Building Strategies in Airbnb Messages. In *Linguistic and Extralinguistic in Interaction*, 65-81.
- Sanosi, A. B. (2018). The effect of Quizlet on vocabulary acquisition. *Asian Journal of Education and e-Learning*, 6(4), 71-77.
- Schroedler, T. (2018). The Value of Foreign Language Skills in International Business for Native English Speaking Countries: A Study on Ireland. *English in Business and Commerce: Interactions and Policies*, 6, 231-255.
- Setiawan, M. R., & Wiedarti, P. (2020). The Effectiveness of Quizlet Application Towards Students' Motivation in Learning Vocabulary. *Studies in English Language and Education*, 7(1), 83-95.
- Waluyo, B., & Bucol, J. L. (2021). The Impact of Gamified Vocabulary Learning Using Quizlet on Low-Proficiency Students. *Computer Assisted Language Learning Electronic Journal*.
- Weissheimer, J., de Souza, J. G. M., Antunes, J. P. L., & de Souza Filho, N. S. (2019). Gamification And L2 Vocabulary Learning: The Vocabox Experience in the Languages Without Borders Program. *Revista Linguagem & Ensino*, 22(4), 1136-1154.
- Wright, C. (1992). *The Benefits of ESP*. Cambridge Language Consultations.
- Wu., & Huang. (2017). Continued Use of An Interactive Computer Game-Based Visual Perception Learning System in Children with Developmental Delay. *International Journal of Medical Informatics*. 107. 76-87.