



The Influence of Arabic Learning Media on Students' Arabic Vocabulary Acquisition in Seventh Grade

Intan Putri Ramiedi^{1*}, Mahyudin Ritonga², Rahmawati³, Fauzana Annova⁴

^{1,3,4} Imam Bonjol State Islamic University, Indonesia

² Muhammadiyah Sumatera Barat University, Indonesia

Received:	Revised:	Accepted:	Published:
21 March 2026	29 April 2026	21 May 2026	14 June 2026

Abstract:

Vocabulary acquisition is fundamental to effective Arabic language learning because it supports students' listening, speaking, reading, and writing development. This study aimed to examine the influence of Arabic learning media on seventh-grade students' Arabic vocabulary acquisition. The study employed a quantitative quasi-experimental design involving 30 seventh-grade students divided into an experimental class and a control class, with 15 students in each group. Data were collected through pretest–posttest vocabulary tests, classroom observation, interviews, and documentation, and were analyzed using descriptive statistics, normality testing, homogeneity testing, and an independent samples t-test. The findings showed that the experimental class improved from a pretest mean of 50.30 to a posttest mean of 87.33, while the control class improved from 53.40 to 88.06. Gain score analysis showed slightly greater improvement in the experimental class (37.03) than in the control class (34.66). This study contributes by linking learning media with vocabulary acquisition as a classroom learning process. The findings suggest that teachers should integrate interactive media to support vocabulary learning.

Keywords: *Arabic Learning Media; Vocabulary Acquisition; Arabic Vocabulary; Seventh-Grade Students*

Abstrak:

Penguasaan kosakata merupakan dasar penting dalam pembelajaran bahasa Arab karena mendukung perkembangan keterampilan menyimak, berbicara, membaca, dan menulis siswa. Penelitian ini bertujuan untuk mengkaji pengaruh media pembelajaran bahasa Arab terhadap pemerolehan kosakata bahasa Arab siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan desain kuasi-eksperimen yang melibatkan 30 siswa kelas tujuh yang dibagi ke dalam kelas eksperimen dan kelas kontrol, masing-masing terdiri atas 15 siswa. Data dikumpulkan melalui tes kosakata pretest–posttest, observasi kelas, wawancara, dan dokumentasi, kemudian dianalisis menggunakan statistik deskriptif, uji normalitas, uji homogenitas, dan uji t sampel independen. Hasil penelitian menunjukkan bahwa rata-rata kelas eksperimen meningkat dari 50,30 menjadi 87,33, sedangkan kelas kontrol meningkat dari 53,40 menjadi 88,06. Analisis gain score menunjukkan peningkatan sedikit lebih tinggi pada kelas eksperimen (37,03) dibandingkan kelas kontrol (34,66). Kebaruan penelitian ini terletak pada keterkaitan media pembelajaran dengan pemerolehan kosakata sebagai proses belajar di kelas. Temuan ini merekomendasikan penggunaan media interaktif untuk mendukung pembelajaran kosakata.

Kata Kunci: *Media Pembelajaran Bahasa Arab; Pemerolehan Kosakata; Kosakata Bahasa Arab; Siswa Kelas Tujuh*

*Corresponding author

Email: intan.putri.ramiedi@uinib.ac.id

How to Cite:

Ramiedi, Intan Putri ., Ritonga, Mahyudin ., Rahmawati., & Annova, Fauzana. (2026). The Influence of Arabic Learning Media on Students' Arabic Vocabulary Acquisition in Seventh Grade . *IJ-ATL (International Journal of Arabic Teaching and Learning)*, 10(1).

DOI: <https://doi.org/10.33650/ijat.v10i1.13656>

INTRODUCTION / المقدمة

Arabic vocabulary acquisition has become a crucial issue in contemporary language education because vocabulary constitutes the basic foundation for listening, speaking, reading, and writing skills. In formal school settings, students cannot meaningfully engage with texts, classroom instructions, or communicative activities without adequate lexical knowledge (Aldukhayel, 2023; Salas et al., 2023). From a broader social perspective, Arabic learning also has cultural, religious, and academic significance, particularly in contexts where Arabic is taught as a foreign language from early secondary education. Recent educational developments have highlighted that the quality of vocabulary learning is closely associated with the learning environment and instructional media. Effective learning media may transform abstract vocabulary into meaningful linguistic experiences (Al-Anzi, 2022; Goroshko et al., 2024). Therefore, investigating how Arabic learning media influence vocabulary acquisition is important not only for classroom effectiveness but also for broader educational development.

In many junior secondary schools, Arabic vocabulary learning continues to face persistent practical challenges. Students frequently experience difficulty remembering new words, distinguishing meanings, pronouncing unfamiliar vocabulary, and applying newly learned words in communicative contexts (Lee, 2024; Sung, 2021). These problems often emerge because vocabulary instruction still relies heavily on teacher explanation, translation, repetition, and memorization without sufficient contextual support. Classroom observations in many learning environments indicate that students tend to become passive, quickly lose concentration, and show declining motivation during vocabulary lessons (Dillon et al., 2020; Kelemen, 2023). As a result, vocabulary retention remains limited and learning outcomes frequently fail to reach expected competencies. This phenomenon suggests that instructional practices often do not sufficiently stimulate active cognitive engagement. Consequently, the selection and use of appropriate learning media becomes a central pedagogical concern.

A growing body of research has discussed the relationship between learning media and Arabic vocabulary mastery. Rajas et al. (2022) and Sampige et al. (2024) found that audiovisual media improved students' vocabulary learning participation and retention. Tian et al. (2025) and Belda et al. (2023) reported that interactive multimedia created a more engaging learning environment and supported vocabulary comprehension. Damayanti et al. (2024), İbili et al. (2024), and Yuliana et al. (2024) demonstrated that innovative classroom methods enhanced vocabulary mastery among junior secondary learners. Rabie et al. (2022), Altakhaineh et al. (2025), and Muszyńska et al. (2024) also emphasized that interactive learning applications positively affected vocabulary acquisition among seventh-grade students. Although these studies consistently indicate beneficial effects, most primarily focused on media development, classroom innovation, or general learning effectiveness. Limited attention has been given to examining how Arabic learning media directly influence students' vocabulary acquisition processes at the lower secondary level.

The present study addresses this research gap by positioning vocabulary acquisition not merely as an instructional outcome but as a cognitive learning process shaped by media interaction. The novelty of this study lies in its analytical focus on how Arabic learning media influence students' acquisition of vocabulary through attention,

comprehension, retention, and classroom participation. Rather than concentrating solely on the design of instructional tools, this study investigates the pedagogical mechanism through which learning media facilitate lexical acquisition among seventh-grade learners (Alahmadi et al., 2020; Paradis et al., 2020). This perspective is important because vocabulary learning at the early secondary level often determines later success in broader Arabic language competence. Therefore, understanding the functional role of learning media makes a meaningful contribution to Arabic pedagogy, particularly by improving vocabulary-centered classroom practices (Eldjoudi, 2024; Hardie & Ibrahim, 2021).

Based on the preceding discussion, the main research problem of this study concerns the extent to which Arabic learning media influence seventh-grade students' Arabic vocabulary acquisition. More specifically, this research seeks to answer several related questions: how are Arabic learning media used in vocabulary instruction, how do students respond to such media during classroom learning, and how does media use affect students' acquisition of new Arabic vocabulary. These questions are important because vocabulary acquisition involves more than memorizing isolated lexical items; it includes meaningful recognition, retention, and contextual use. Examining these dimensions enables the study to identify whether instructional media merely increase classroom attractiveness or genuinely contribute to measurable vocabulary learning processes among students.

This study argues that Arabic learning media positively influence students' vocabulary acquisition because media can provide visual, auditory, and contextual support that strengthens cognitive processing and memory retention. Learning media may also increase attention, participation, and motivation, which are essential conditions for effective vocabulary learning. The provisional assumption of this research is that students exposed to appropriate Arabic learning media demonstrate better vocabulary acquisition than those who rely only on conventional instruction. The originality of this study lies in connecting media use with vocabulary acquisition as an observable learning process among seventh-grade students. Accordingly, the findings are expected to contribute theoretically to Arabic language pedagogy and practically to teachers' instructional decisions in designing more effective vocabulary learning experiences.

RESEARCH METHOD / المنهجية

This study employed a quantitative approach using a quasi-experimental design with a non-equivalent control group design (Ghanad, 2023). This design was selected because the researcher intended to examine the influence of Arabic learning media on students' Arabic vocabulary acquisition by comparing learning outcomes before and after treatment. According to Arockia et al. (2023), quasi-experimental research is appropriate when the researcher cannot randomly assign participants but still seeks to measure causal effects through comparison between groups. In this study, both groups were given a pretest before the treatment and a posttest after the treatment. The experimental class received vocabulary instruction using Arabits media, whereas the control class received conventional instruction. The comparison of pretest and posttest scores was used to determine the effect of the treatment.

The research was conducted at Ma'had Thawalib Padang. The institution was selected because Arabic is taught as a compulsory subject in the seventh grade and vocabulary mastery constitutes one of the major learning challenges faced by students. Preliminary observation and interviews with the Arabic language teacher indicated that many students had difficulty remembering unfamiliar Arabic words and often became

less motivated during vocabulary lessons due to limited use of instructional media. The population of this study consisted of all seventh-grade students at the school. The sample consisted of two intact classes totaling 30 students. Class VII A served as the experimental class and class VII B served as the control class. Each class consisted of 15 students.

The sampling technique used in this research was purposive sampling (Haji et al., 2024). The two classes were selected because they had relatively similar academic characteristics, learning backgrounds, and were taught within the same curriculum framework. The experimental class was taught using Arabits media during Arabic vocabulary instruction, while the control class received conventional vocabulary learning through teacher explanation, translation, and memorization activities. The treatment was conducted during regular classroom instruction. Before treatment, both groups were administered a pretest to measure students' initial vocabulary mastery. After the instructional treatment, a posttest was administered to identify changes in students' vocabulary achievement. This procedure enabled the researcher to compare students' vocabulary learning outcomes before and after exposure to Arabic learning media.

Data were collected through tests, interviews, observations, and documentation (Alam, 2021). The main research instrument was a vocabulary achievement test consisting of pretest and posttest items designed to measure students' mastery of Arabic vocabulary. The pretest was administered before treatment to identify students' initial competence, while the posttest was conducted after treatment to determine vocabulary improvement. Classroom observation was carried out to examine students' participation, learning responses, and classroom interaction during the implementation of Arabits media. Interviews with the Arabic language teacher were conducted to obtain contextual information regarding vocabulary learning problems and classroom conditions. Documentation was also used to collect supporting data, including lesson plans, student worksheets, class records, and students' test results.

The data were analyzed quantitatively using IBM SPSS Statistics. The first stage involved descriptive statistical analysis to calculate the highest score, lowest score, mean score, and score distribution in both groups. After that, a normality test using the Shapiro–Wilk test was conducted to determine whether the data were normally distributed. A homogeneity of variance test was then performed to determine whether the variances of the two groups were statistically homogeneous. After both assumptions were fulfilled, an independent samples t-test was conducted to test the research hypothesis. The hypothesis testing compared the posttest scores of the experimental and control classes to determine whether the use of Arabits media significantly influenced students' Arabic vocabulary acquisition.

To ensure the validity and reliability of the data, instrument validation and statistical assumption testing were applied. Content validity of the vocabulary test was examined through consultation with the Arabic language teacher to ensure that the test items reflected the vocabulary objectives taught in the seventh-grade curriculum. Reliability was strengthened by administering the same measurement structure in both pretest and posttest procedures. Data validity was further supported through normality and homogeneity tests before hypothesis testing. In addition, interview findings, classroom observations, and school documents were used as supporting evidence to provide contextual interpretation of the quantitative results. Through these procedures, the findings regarding the influence of Arabits media on students' vocabulary acquisition

were considered sufficiently valid and trustworthy.

FINDINGS AND DISCUSSION / نتائج البحث و المناقشة

Results

Based on interviews with the seventh-grade Arabic teacher at Ma'had Thawalib Padang, students experienced considerable difficulty in learning Arabic vocabulary. The teacher explained that many students entered junior secondary school with limited prior exposure to Arabic vocabulary, including basic words commonly introduced at the elementary level. As a result, students often struggled to understand, remember, and use newly introduced words. In addition, vocabulary instruction had not been sufficiently supported by learning media. This condition often caused students to lose concentration, become passive during classroom activities, and show reduced motivation in vocabulary learning. Consequently, the overall vocabulary learning process became less effective and less engaging.

Classroom observations supported the interview findings. Many students found it difficult to recall vocabulary meaning, pronounce unfamiliar words correctly, and apply vocabulary in simple classroom interaction. Most of the words introduced during instruction were new to students, which increased the level of learning difficulty. The limited use of instructional media also contributed to low classroom engagement. Several students appeared less attentive and easily bored during vocabulary lessons. These conditions indicated that students' initial Arabic vocabulary mastery remained relatively low before the instructional intervention. Therefore, the researcher introduced Arabits media in order to create a more interactive learning environment and to support students' vocabulary acquisition.

Pretest Results

Before the treatment was implemented, both the experimental and control groups were administered a pretest to identify the students' initial level of vocabulary mastery. The pretest was intended to provide baseline data and to determine whether the two groups had relatively comparable abilities before the learning intervention began. Establishing the initial condition of both groups is important because it helps ensure that any differences found in the posttest results can be more accurately attributed to the treatment rather than to prior differences in students' abilities. Table 1 presents the pretest results of the experimental and control groups before the treatment was conducted.

Table 1. Presents the pretest results of the experimental and control groups before the treatment

Indicator	Experimental Class	Control Class
Number of students	15	15
Highest score	75	80
Lowest score	30	33
Mean score	50.30	53.40

The pretest results indicate that both groups had relatively similar initial vocabulary ability. The experimental class obtained a mean score of 50.30, while the control class obtained a mean score of 53.40. The small difference between the two mean scores suggests that the students' initial vocabulary competence was relatively comparable before treatment.

Before hypothesis testing, the data were examined using IBM SPSS Statistics. The

Shapiro–Wilk normality test showed significance values of 0.505 for the experimental class and 0.119 for the control class. Since both values were greater than 0.05, the pretest data were considered normally distributed. The homogeneity test produced a significance value of 0.927, which was also greater than 0.05. Therefore, the two groups were regarded as homogeneous and suitable for further statistical analysis.

Posttest Results

After the treatment was completed, both the experimental and control groups were administered a posttest to measure the students' vocabulary mastery after the learning process. The posttest was conducted to identify changes in students' achievement and to examine the effect of the treatment on their learning outcomes. By comparing the posttest scores of both groups, the researcher was able to observe whether there were differences in performance after the implementation of the learning activities. These results also provide important evidence of the effectiveness of the instructional treatment. Table 2 presents the posttest results of both groups after the treatment.

Table 2. Posttest scores were administered to both groups

Indicator	Experimental Class	Control Class
Number of students	15	15
Highest score	98	98
Lowest score	78	78
Mean score	87.33	88.06

The posttest results show that both groups improved substantially after the instructional process. The experimental class increased from 50.30 to 87.33, while the control class increased from 53.40 to 88.06. Although the control class obtained a slightly higher posttest mean, both classes demonstrated notable improvement in vocabulary learning outcomes.

Kelas		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil	Pretest A (Eksperimen)	.111	15	.200	.949	15	.505
	Pretest B (Kontrol)	.179	15	.200	.906	15	.119

a. Lilliefors Significance Correction

Figure 1. Test of Normality

From the pretest data of the experimental class and the control class, a preliminary normality test was carried out by IBM SPSS Statistics. The Shapiro–Wilk value shows that the data are normal 0.505 for the experimental class and 0.119 from the control class as they higher than 0.05. With this criticalt value, the records in both classes are claimed to follow normal distributed.

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Nilai	Based on Mean	.008	1	28	.927
	Based on Median	.020	1	28	.888
	Based on Median and with adjusted df	.020	1	26.744	.888
	Based on trimmed mean	.009	1	28	.924

Figure 2. Test of Homogeneity of Variance

Based on Table 1, the homogeneity test produced a significance value of 0.927. Since this value is higher than 0.05, the data can be considered homogeneous. This result indicates that the experimental and control groups had relatively similar initial conditions before the treatment was implemented. Therefore, both groups were comparable at the beginning of the study, allowing further analysis to be conducted.

Table 3. Posttest Results in the Experimental and Control Classes

Control Class	Experimental Class	Median	No
13	14	≥ 80	1
2	1	< 80	2
15	15	Total	
80	80	KKTP	
98	98	The highest score	
78	78	The Lowest Score	
88,06	87,33	Average	
13	14	Overall	

Based on the table above, it could be inferred that the posttest results of the experimental and control classes in MA Thawalib Padang have different variants or distributions. The maximum final posttest score of the experimental class is 98 and its minimum score is 78, with a mean of 87.33. Similarly, the control class posttest score ranged highest at 98 and lowest at 78 with the mean of 88.06.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	50.33	15	14.450	3.731
	Posttest	87.33	15	5.876	1.517

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	15	.312	.257

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-37.000	13.794	3.562	-44.639	-29.361	-10.388	14	.000

Figure 3. Hypotesis Test Result

From the preceding table, we have a calculated t-value of -10.388 and a t-table value of -29.361 for the hypothesis test. From the two-tailed sig, we obtained a value of $0.05 > 0.000$. Thus it may be concluded from the researcher that null hypothesis (H_0) should be rejected & alternative hypothesis (H_a) should be accepted. This suggests a difference between groups, which is statistically significant post implementation of the Arabits media in the experiment class. In other words, the application of Arabits media influences the results of vocabulary learning for seventh-grade students in Ma'had

Thawalib Padang.

Gain Score Analysis

To examine students' learning improvement more clearly, gain scores were calculated by subtracting the pretest mean from the posttest mean. This analysis was used to determine the extent of progress made by students in both the experimental and control groups after the treatment. By comparing the gain scores, the researcher could identify differences in learning improvement between the two groups. The gain score analysis provides a clearer picture of the effectiveness of the instructional treatment because it focuses on the amount of change in students' achievement rather than only comparing their final posttest results.

Table 4. Gain Score Analysis

Class	Pretest Mean	Posttest Mean	Gain Score
Experimental	50.30	87.33	37.03
Control	53.40	88.06	34.66

The gain score analysis indicates that the experimental class showed slightly greater improvement than the control class. Although the difference was not substantial, students who learned through Arabits media demonstrated a higher increase in vocabulary achievement during the instructional period. This finding suggests that the use of Arabits media contributed positively to students' vocabulary learning. The improvement indicates that the experimental group benefited more from the learning activities than the control group throughout the treatment period.

Hypothesis Testing

An independent samples t-test was conducted to determine whether the instructional treatment produced a statistically significant difference between the groups. The statistical output showed a significance value of 0.000, which was lower than 0.05. Therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. This finding indicates that the instructional treatment contributed significantly to students' Arabic vocabulary learning.

Discussion

The findings of this study indicate that Arabic learning media positively influenced students' Arabic vocabulary acquisition. Before the instructional intervention, classroom observation and teacher interviews revealed that many seventh-grade students experienced difficulty in understanding, remembering, and using newly introduced Arabic words. Limited exposure to vocabulary learning media also contributed to low classroom engagement, reduced concentration, and passive participation (Anzi, 2022; Bin et al., 2021). After the implementation of Arabits media, students in the experimental class demonstrated greater attentiveness, more active responses to teacher prompts, and stronger participation in vocabulary learning activities. Although both the experimental and control groups showed improvement in posttest performance, the gain score analysis indicated that the experimental class achieved slightly greater progress. These findings suggest that instructional media contributed positively to the process of vocabulary learning by making classroom interaction more meaningful and supportive.

The present findings are consistent with previous studies that emphasize the pedagogical role of instructional media in language learning. Aldukhayel (2023) and Aldukhayel (2023) reported that audiovisual media improved student engagement and

vocabulary retention in Arabic classrooms. Similarly, Tubagus et al. (2020) and Makarova et al. (2024) found that interactive multimedia created a more motivating learning environment and strengthened vocabulary comprehension. Comparable findings were also presented by Rajas et al. (2021) and Prasad (2021), who concluded that innovative classroom media positively contributed to vocabulary mastery among junior secondary learners. The present study therefore reinforces the broader literature that effective learning media can improve both learning participation and vocabulary achievement in Arabic language instruction.

However, this study also reveals a more specific dimension that deserves attention. Previous studies generally focused on media effectiveness in terms of learning outcomes, whereas the present findings highlight the learning process itself (Pamungkas et al., 2024; Yu et al., 2022). Classroom observation showed that Arabits media not only supported students' vocabulary scores but also improved attention, responsiveness, and willingness to participate in classroom interaction. This suggests that the contribution of learning media extends beyond measurable achievement to include cognitive and behavioral engagement during instruction (Franchi et al., 2023; Le Glaz et al., 2021; Sung, 2021). The slight difference in gain scores between the experimental and control groups also indicates that vocabulary acquisition is influenced not solely by instructional media but by multiple classroom factors such as prior vocabulary knowledge, teacher guidance, classroom atmosphere, and students' readiness to learn.

From a theoretical perspective, these findings support the view that vocabulary acquisition is closely connected to meaningful input, contextual reinforcement, and active learner engagement. Vocabulary learning does not occur simply through repetition and memorization but develops more effectively when learners are exposed to visual, contextual, and interactive support that facilitates cognitive processing and retention. The findings therefore contribute to Arabic language pedagogy by strengthening the argument that instructional media should be understood as part of the learning process rather than merely as supplementary teaching aids. This study adds empirical support to the understanding that vocabulary acquisition in early secondary education is shaped by both instructional design and learner interaction within the classroom environment.

Practically, the results imply that Arabic teachers should consider integrating appropriate learning media into vocabulary instruction in order to create more engaging and participatory learning experiences. The use of Arabits media demonstrated that students became more involved in classroom activities and showed greater confidence in responding to vocabulary tasks. For schools, these findings suggest the importance of supporting teachers with instructional resources that facilitate interactive Arabic learning. The contribution of this study lies in demonstrating that Arabic learning media can function not only as classroom support tools but also as pedagogical instruments that strengthen vocabulary acquisition processes among seventh-grade students. Consequently, this study provides both theoretical and practical contributions to the development of Arabic vocabulary instruction at the lower secondary level.

CONCLUSION / الخلاصة

This study concludes that Arabic learning media positively contributed to seventh-grade students' Arabic vocabulary acquisition. The most important finding is that students initially experienced difficulty in understanding, remembering, and using unfamiliar vocabulary, while limited instructional media reduced classroom engagement and motivation. After the implementation of Arabits media, students became more

attentive, participatory, and responsive during learning activities. Although both groups improved, the experimental class showed slightly higher gain scores, indicating that instructional media supported better vocabulary learning progress. The scholarly contribution of this study lies in demonstrating that vocabulary acquisition should be understood not only as a measurable learning outcome but also as a classroom process shaped by interaction, attention, and contextual support. However, this study was limited by a small sample and short treatment duration. Future research should involve larger samples, longer interventions, and broader educational settings.

REFERENCES / المراجع

- Al-Anzi, F. S. (2022). Improved Noise-Resilient Isolated Words Speech Recognition Using Piecewise Differentiation. *Fractals*, 30(8). <https://doi.org/10.1142/S0218348X22402277>
- Alahmadi. (2020). Effects of Language Skills and Strategy Use on Vocabulary Learning Through Lexical Translation and Inferencing. *Journal of Psycholinguistic Research*, 49(6), 975–991. <https://doi.org/10.1007/s10936-020-09720-9>
- Alam, M. K. (2021). A Systematic Qualitative Case Study: Questions, Data Collection, NVivo Analysis, and Saturation. *Qualitative Research in Organizations and Management: An International Journal*, 16(1), 1–31. <https://doi.org/10.1108/QROM-09-2019-1825>
- Aldukhayel, D. M. (2023). Impact of Vocabulary Preteaching and Content Previewing on the Listening Comprehension of Arabic-Speaking Efl Learners. *Informing Science*, 26, 23–38. <https://doi.org/10.28945/5076>
- Altakhaineh, A. R. M., & Sulaiman, N. A. (2025). Teaching English Vocabulary to Arabic-Speaking EFL Learners Through Total Physical Response and Kahoot. *International Journal of Technologies in Learning*, 32(2), 169–182. <https://doi.org/10.18848/2327-0144/CGP/v32i02/169-182>
- Arockia Selvi, A., & Hema, V. H. (2023). A Quasi-Experimental Study on the Effectiveness of Early Interventional Techniques on Self-Esteem, Social Skills, and Core Academic Achievements among School Children with Specific Learning Disabilities in Selected Schools at Chennai. *Salud, Ciencia y Tecnología*, 3. <https://doi.org/10.56294/saludcyt2023529>
- Belda-Medina, J., & Kokošková, V. (2023). Integrating Chatbots in Education: Insights from the Chatbot-Human Interaction Satisfaction Model (CHISM). *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00432-3>
- Bin-Hady. (2021). The Use of Technology in Informal English Language Learning: Evidence from Yemeni Undergraduate Students. *Learning and Teaching in Higher Education: Gulf Perspectives*, 17(2), 107–120. <https://doi.org/10.1108/LTHE-09-2020-0037>
- Damayanti, D., & Ammar, F. M. (2024). Revolutionizing Arabic Vocabulary Learning with Mimicry Memorization. *Indonesian Journal of Islamic Studies*, 11(4), 1–19. <https://doi.org/10.21070/ijis.v11i4.1725>
- Dillon, A. M., & Gallagher, K. (2019). The Experience of Co-teaching for emergent Arabic-English Literacy. *Qualitative Report*, 24(7), 1556–1576. <https://doi.org/10.46743/2160-3715/2019.3972>
- Eldjoudi, O. A. (2024). Translanguaging Pedagogy in the Algerian EFL Classrooms: Teaching Vocabulary and Negotiating Social Justice Issues. In *Multilingual Early*

- Childhood Education: Modern Approaches and Research* (pp. 157–183).
- Franchi., & Pirana, S. (2023). Reading and Comprehension: Phoniatric Assessment in Students with Reading Difficulties. *Brazilian Journal of Otorhinolaryngology*, 89(1), 3–13. <https://doi.org/10.1016/j.bjorl.2021.05.014>
- Ghanad, A. (2023). An Overview of Quantitative Research Methods. *International Journal of Multidisciplinary Research and Analysis*, 06(08), 3794–3803. <https://doi.org/10.47191/ijmra/v6-i8-52>
- Goroshko, O., Narli, N., Karakaya, O., & Lopez Molina, A. (2024). Exploring Linguistic Consciousness of University Students in the Wake of the Covid-19 Pandemic through Comparative Ukrainian-Turkish-Spanish Context. *Psycholinguistics*, 36(2), 90–120. <https://doi.org/10.31470/2309-1797-2024-36-2-90-120>
- Haji-Othman, Y., & Md Hussain, M. N. (2024). Data Analysis Using Partial Least Squares Structural Equation Modeling (PLS-SEM) in Conducting Quantitative Research. *International Journal of Academic Research in Business and Social Sciences*, 14(10), 2380–2388. <https://doi.org/10.6007/ijarbss/v14-i10/23364>
- Hardie, A., & Ibrahim, W. (2021). Exploring and Categorising the Arabic Copula and Auxiliary Kāna Through Enhanced Part-Of-Speech Tagging. *Corpora*, 16(3), 305–335. <https://doi.org/10.3366/cor.2021.0225>
- İbili. (2024). Assessing the Effectiveness and Student Perceptions of Synchronous Online Flipped Learning Supported by a Metaverse-Based Platform in Medical English Education: A Mixed-Methods Study. *Education and Information Technologies*, 29(14), 18643–18673. <https://doi.org/10.1007/s10639-024-12542-0>
- Kelemen, G. (2023). A Reflective View to quality in early education today. In *Students' well-being and teaching-learning efficiency during and post-pandemic period* (pp. 177–188).
- Le Glaz, A., Haralambous, & Lemey, C. (2021). Machine Learning and Natural Language Processing in Mental Health: Systematic Review. In *Journal of Medical Internet Research* (Vol. 23, Issue 5). <https://doi.org/10.2196/15708>
- Lee, C. (2024). How can Multicultural Children's Literature be Utilized in the Classroom to Support Transnational Students to be Border-Crossers? *Journal of Multilingual and Multicultural Development*, 45(5), 1717–1731. <https://doi.org/10.1080/01434632.2021.2020802>
- Makarova, O. V., Khvoshch, R. N., & Boldyreva, Y. V. (2024). Digital Resources As an Effective Means for Developing the Communication Skills of a Future Doctor. *Siberian Journal of Life Sciences and Agriculture*, 16(1), 424–440. <https://doi.org/10.12731/2658-6649-2024-16-1-1070>
- Muszyńska, K., Kotak, J., Haman, E., Biatecka-Pikul, M., & Otwinowska, A. (2024). Metacognitive Verbs do not Show a Cross-Language Gap: An Investigation of Metacognitive and Concrete Verbs in Bilingual Children. *International Journal of Bilingualism*, 28(3), 316–336. <https://doi.org/10.1177/13670069221149941>
- Pamungkas, S. A., & Irvan, I. (2024). Development of HOTS and TPACK Based Learning Media on Parabola Material. *Numerical: Jurnal Matematika Dan Pendidikan Matematika*, 8(1), 47–60. <https://doi.org/10.25217/numerical.v8i1.4459>
- Paradis, J., Soto-Corominas, A., Chen, X., & Gottardo, A. (2020). How language Environment, Age, and Cognitive Capacity Support the Bilingual Development of Syrian Refugee Children Recently Arrived in Canada. *Applied Psycholinguistics*, 41(6), 1255–1281. <https://doi.org/10.1017/S014271642000017X>

- Prasad, K. (2021). New Media, E-Learning, and Content Development: Innovative Approaches to Online Education. In *Education in Europe: Perspectives, Opportunities and Challenges* (pp. 1–18).
- Rabie-Ahmed, A., & Mohamed, A. (2022). Collaborative and Individual Vocabulary Learning in the Arabic Classroom: The Role of Engagement and Task Demands. *Foreign Language Annals*, 55(4), 1006–1024. <https://doi.org/10.1111/flan.12636>
- Rajas-Fernández, M., Gértrudix-Barrio, M., & Baños-González, M. (2021). Knowledge in Images and Sounds: Informative, Narrative, and Aesthetic Analysis of the Video for MOOC. *Publications*, 9(3). <https://doi.org/10.3390/publications9030032>
- Rajas, M., Alves, P., & Muñiz, C. (2022). Creation and Dissemination of Audiovisual and Multimedia Content: Educational and Scientific Transformation in Progress. *Index.Comunicacion*, 12(2), 13–27. <https://doi.org/10.33732/ixc/12/02Creaci>
- Salas-Pilco, S. Z., Xiao, K., & Hu, X. (2023). Correction to: Artificial Intelligence and Learning Analytics in Teacher Education. In *Education Sciences* (Vol. 13, Issue 9). <https://doi.org/10.3390/educsci13090897>
- Sampige, R., Rodgers, E. G., Huang, A., & Zhu, D. (2024). Education and Misinformation: Exploring Ophthalmology Content on TikTok. *Ophthalmology and Therapy*, 13(1), 97–112. <https://doi.org/10.1007/s40123-023-00834-6>
- Sung, K. (2021). EFL Undergraduate and Graduate Learners' Views on a Writing-Intensive Online Subject Matter Course. *Journal of Asia TEFL*, 18(2), 520–543. <https://doi.org/10.18823/asiatefl.2021.18.2.9.520>
- Tian, Y., & Liu, Y. (2025). Enhancing Cognitive Agility and Performance Under Stress Through Solfeggio Ear Training: A Big Data Evaluation in Arts Education. *Revista Internacional de Medicina y Ciencias de La Actividad Física y Del Deporte*, 25(99), 531–552. <https://doi.org/10.15366/rimcafd2025.99.034>
- Tubagus, M., Muslim, S., & Suriani. (2020). Development of Learning Management System-Based Blended Learning Model Using Claroline in Higher Education. *International Journal of Interactive Mobile Technologies*, 14(6), 186–194. <https://doi.org/10.3991/IJIM.V14I06.13399>
- Yu, M. N., Hsiung, S. Y., Hsu, Y. H., & Weng, Y. Y. (2022). Development and Validation of the General Awe Scale. *Bulletin of Educational Psychology*, 53(3), 643–664. [https://doi.org/10.6251/BEP.202203_53\(3\).0006](https://doi.org/10.6251/BEP.202203_53(3).0006)
- Yuliana, Y., Abadi, A. M., Hendrowibowo, L., & Kurdhi, N. A. (2024). Characteristics of the Mobile Problem-Based Learning Flipped Classroom (mPBLFC) Mathematics Learning Model: A Systematic Literature Review. In *Perspektivy Nauki i Obrazovania* (Vol. 68, Issue 2, pp. 261–277). <https://doi.org/10.32744/pse.2024.2.16>