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Designing Visually-Enriched Arabic Vocabulary Instruction Using Canva: Empirical Evidence from a Pre-Experimental Study in an Indonesian Islamic Secondary School

Fahriza Ramadhan¹, Fatma Yulia²

^{1,2}*Universitas Islam Negeri Sumatera Utara, Indonesia*

Corresponding E-mail: fabrizaramadhan@uinsu.ac.id

Abstract

This study aims to examine the effect of Canva-based representative visual media on improving Arabic vocabulary mastery among seventh-grade students at MTs Negeri 2 Medan. Initial classroom observations indicated low vocabulary retention and diminished student motivation, largely due to monotonous instructional methods and limited use of visual learning media. To address these challenges, Canva-based visual media were implemented as an instructional intervention. The study employed a quantitative approach using a pre-experimental design (one-group pretest-posttest). Data analysis involved both descriptive and inferential statistics, specifically utilizing the paired sample t-test with the aid of SPSS. The findings revealed a significant increase in the mean score from 45.42 (pretest) to 81.03 (posttest), with a gain of 35.61 points. A significance value of $0.001 < 0.05$ confirmed that the use of Canva-based visual media had a statistically significant impact on students' Arabic vocabulary acquisition. These findings imply that the integration of digital visual media should be seriously considered in the design of Arabic language instruction at the secondary school level.

Keywords: *vocabulary mastery, visual media, Canva, Arabic language learning, multimodal instruction*

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh media visual representatif berbasis Canva terhadap peningkatan penguasaan kosakata bahasa Arab siswa kelas VII MTs Negeri 2 Medan. Hasil observasi awal

menunjukkan rendahnya retensi kosakata siswa serta rendahnya minat belajar akibat metode pembelajaran yang monoton dan minim penggunaan media visual. Untuk menjawab permasalahan tersebut, digunakan media visual berbasis Canva sebagai intervensi pembelajaran. Penelitian ini menggunakan pendekatan kuantitatif dengan desain pre-eksperimental (one group pretest-posttest). Analisis data dilakukan melalui analisis deskriptif dan inferensial menggunakan uji paired sample t-test dengan bantuan SPSS. Hasil penelitian menunjukkan peningkatan skor rata-rata dari 45,42 (pretest) menjadi 81,03 (posttest), dengan selisih sebesar 35,61 poin. Nilai signifikansi sebesar $0,001 < 0,05$ menunjukkan bahwa penggunaan media visual Canva berpengaruh signifikan terhadap penguasaan kosakata bahasa Arab siswa. Temuan ini memberikan implikasi bahwa integrasi media digital visual perlu dipertimbangkan dalam desain pembelajaran bahasa Arab di tingkat menengah.

Kata Kunci: *Penguasaan kosakata, media visual, Canva, pembelajaran bahasa Arab, pembelajaran multimodal*

Introduction

Vocabulary mastery is a fundamental pillar in foreign language learning, including Arabic.¹ Without adequate vocabulary knowledge, students will struggle to comprehend meaning, express ideas, and establish effective communication, both orally and in writing. Vocabulary functions as a core linguistic element that carries meaning and thus plays a central role across all language skills.² In the context of Arabic language instruction in Indonesia, vocabulary acquisition is often a major challenge for learners. This is primarily due to limited language exposure in daily life, lack of active student engagement, and teaching approaches that tend to be textual and passive.³

¹ Mohd Haniff Mohd Tahir et al., "The Application of Visual Vocabulary for ESL Students' Vocabulary Learning," *Arab World English Journal* 11, no. 2 (June 15, 2020): 323–38, <https://doi.org/10.24093/awej/vol11no2.23>.

² Luthfi Farihatun Nisa' and Nurul Murtadho, "Development of Educative Magazine as a Bilingual Learning Medium Based on Arabic and English Vocabulary," *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 11, no. 2 (December 8, 2023): 197–212, <https://doi.org/10.23971/altarib.v11i2.7311>.

³ Khoirul Mubin et al., "Linguistic Harmonization: Dissecting Alfiyah Ibn Malik with Chomsky's Transformational Generative Theory," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (July 31, 2024): 215–42, <https://doi.org/10.19105/ajpba.v5i2.14610>.

This situation is further exacerbated by instructional methods that remain dominated by conventional textbook-based strategies, lacking support from visual, contextual, or multimodal media.⁴ Teacher-centered and one-way instructional activities result in low cognitive and affective engagement among students. As a consequence, students not only feel bored but also experience difficulties in retaining and recalling the vocabulary that has been taught.⁵ This poses a tangible challenge for Arabic language teachers to design learning experiences that are meaningful, engaging, and capable of enhancing students' overall language proficiency.⁶

To address this challenge, instructional innovations are required that can integrate visual and verbal elements simultaneously to enhance students' comprehension and retention of vocabulary content.⁷ One promising strategy is the use of representative visual media such as educational posters. Posters are characterized by their strong visual appeal, informative nature, and ability to simplify complex linguistic concepts into easily understandable words and images. Moreover, posters are flexible, cost-effective, and can be reused in various instructional settings. Their visual function not only reinforces the representation of vocabulary meaning but also increases student engagement through sensory stimulation and aesthetic appeal.⁸

In language learning practices, visual media have been proven to strengthen associations between words and meanings and to

⁴ Ahmad Zaki Annafiri et al., "Cultural Analysis of the Arabic Language Textbooks of Muhammadiyah Elementary School," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 1 (January 30, 2024): 98–119, <https://doi.org/10.19105/ajpba.v5i1.10989>.

⁵ Ron Darvin and Bonny Norton, "Investment and Motivation in Language Learning: What's the Difference?," *Language Teaching* 56, no. 1 (January 15, 2023): 29–40, <https://doi.org/10.1017/S0261444821000057>.

⁶ Muchsinul Khuluq et al., "The Development of Reading Skill Teaching Materials Based on Prezi Artificial Intelligence," *Arabiyatuna: Jurnal Bahasa Arab* 9, no. 1 (June 31, 2025): 327–46.

⁷ Awaz Naaman Saleem, Narmin Mohammed Noori, and Fezile Ozdamli, "Gamification Applications in E-Learning: A Literature Review," *Technology, Knowledge and Learning* 27, no. 1 (March 2, 2022): 139–59, <https://doi.org/10.1007/s10758-020-09487-x>.

⁸ Guangxiang Liu and Chaojun Ma, "Measuring EFL Learners' Use of ChatGPT in Informal Digital Learning of English Based on the Technology Acceptance Model," *Innovation in Language Learning and Teaching* 18, no. 2 (March 14, 2024): 125–38, <https://doi.org/10.1080/17501229.2023.2240316>.

accelerate the internalization of new vocabulary.⁹ The application of representative visual media, presenting vocabulary in visual forms accompanied by illustrations and contextual examples, helps students develop stronger semantic connections and reduces the cognitive load in understanding the target language.¹⁰ Moreover, such media enhance the effectiveness of instructional delivery by simultaneously engaging both verbal and non-verbal channels, as emphasized in the theories of Dual Coding and Multimedia Learning.¹¹

In the context of integrating technology to optimize the effectiveness of visual media in language instruction, Canva emerges as a web-based graphic design platform that enables the creation of aesthetically appealing, communicative, and contextually relevant teaching materials.¹² Canva provides a wide array of visual elements, such as illustrations, icons, typography, and flexible templates that can be tailored to instructional needs, including Arabic vocabulary teaching. Its advantages include a user-friendly interface, cross-device accessibility, and adaptability to visual styles that match students' characteristics.¹³ This allows educators to efficiently design representative visual media without requiring professional graphic design expertise.

In this study, the visual media used as the instructional intervention were fully developed using the Canva platform. The media featured selected Arabic vocabulary items categorized by thematic units

⁹ Nadia Ulhaq and Lahmuddin Lubis, "Penyusunan Materi Ajar Dalam Rangka Meningkatkan Keterampilan Berbicara Bahasa Arab Pada Siswa," *Journal of Education Research* 4, no. 3 (August 8, 2023): 1202–11, <https://doi.org/10.37985/jer.v4i3.361>.

¹⁰ Fakhur Rashih, "تعليم المفردات للناطقين بغير اللغة العربية," *Lisanudhad: Jurnal Bahasa, Pembelajaran Dan Sastra Arab* 1, no. 2 (2014): 25–38.

¹¹ Fatma Yulia et al., "Effectiveness of Instructional Communication of Mahārah Al-Kalām at Sultan Idris Education University," *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban* 8, no. 2 (December 20, 2024): 216–33, <https://doi.org/10.15575/jpba.v8i2.39201>.

¹² Natalia Dmitrenko et al., "CANVA PLATFORM: VISUAL CONTENT FOR DEVELOPING WRITING SKILLS OF PROSPECTIVE ENGINEERS IN ESP CLASSES," *ENVIRONMENT. TECHNOLOGIES. RESOURCES. Proceedings of the International Scientific and Practical Conference 2* (June 22, 2024): 358–63, <https://doi.org/10.17770/etr2024vol2.8075>.

¹³ Muhammad Alfiana et al., "Usability Testing of the Canva Application As a Student Collaboration Design Media," in *2023 8th International Conference on Information Technology and Digital Applications (ICITDA)* (IEEE, 2023), 1–5, <https://doi.org/10.1109/ICITDA60835.2023.10427037>.

and contextualized through illustrations and simple example sentences to reinforce meaning. The integration of textual and visual elements in a single design frame aims to activate both verbal and visual processing channels, in accordance with the principles of dual coding in multimedia learning theory.¹⁴ Consequently, the use of Canva in media development not only enhances visual appeal and readability but also supports the achievement of instructional objectives more effectively and in line with contemporary pedagogical standards.

Several previous studies provide a relevant foundation for this research. Moro Ramos explored the use of Canva as a tool to promote meaningful learning in English as a foreign language classrooms, finding that materials designed with Canva significantly improved student engagement and understanding.¹⁵ Likewise, Ilyas, Syarif, and Refnaldi investigated Canva-based instructional videos for English learning and reported that such media effectively enhanced students' perceptions of instructional quality.¹⁶ Follow-up research by Prawijaya, Rozi, and Siregar demonstrated that online learning platforms supported by Canva improved instructional effectiveness at the secondary level.¹⁷ Similarly, Hinchcliff and Mehmet developed a dialogic and socially embedded framework for Canva use in marketing classes, which contributed to increased student creativity and participation.¹⁸ Finally, Salam and Mudinillah, in a study at MTs Thawalib Tanjung Limau, found that developing Canva-based

¹⁴ Jamaluddin Shiddiq et al., "Feasibility of Web-Based Digital Arabic Gamification Media for Islamic Junior High School Students," *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (May 27, 2024): 169, <https://doi.org/10.29240/jba.v8i1.8946>.

¹⁵ Sandra Moro Ramos, "Canva Como Herramienta Para Promover El Aprendizaje Significativo En La Enseñanza Del Inglés Como Lengua Extranjera," *European Public & Social Innovation Review* 9 (October 2, 2024): 1–19, <https://doi.org/10.31637/epsir-2024-869>.

¹⁶ Muhammad Ilyas, Hermawati Syarif, and Refnaldi, "The Use of English Language Learning Videos Designed Through Canva App: Students' Perceptions," *International Journal of Interactive Mobile Technologies (IJIM)* 17, no. 08 (April 26, 2023): 100–112, <https://doi.org/10.3991/ijim.v17i08.39215>.

¹⁷ Septian Prawijaya, Fahrur Rozi, and Arifin Siregar, "Online Learning Platform Using Canva: An Alternative Experience to Optimize the Learning Process in the Class," 2022, 140002, <https://doi.org/10.1063/5.0114111>.

¹⁸ Mercedes Hinchcliff and Michael Mehmet, "Embedding Canva into the Marketing Classroom: A Dialogic and Social Learning Approach to Classroom Innovation," *Higher Education, Skills and Work-Based Learning* 13, no. 6 (November 8, 2023): 1174–86, <https://doi.org/10.1108/HESWBL-11-2022-0230>.

applications for distance learning in Arabic significantly improved students' vocabulary outcomes.¹⁹

Collectively, these findings consistently indicate that Canva, as an interactive and flexible digital visual medium, is effective in improving students' motivation, comprehension, and learning outcomes across various language learning contexts, both English and Arabic, thus reinforcing its relevance for this study.

Although a number of international studies have demonstrated the effectiveness of Canva as a visual medium in foreign language education, particularly in enhancing student engagement, content quality, and learning outcomes, most of these investigations have focused on English language learning in general or higher education contexts. Moreover, the majority of studies emphasize Canva's role in developing videos or interactive modules, while few have specifically explored its use as a representative visual medium in teaching Arabic vocabulary. Additionally, studies examining Canva-based visual media within formal Islamic educational settings, such as public madrasahs, remain scarce. Therefore, this study aims to empirically investigate the effectiveness of Canva-based representative visual media in enhancing Arabic vocabulary acquisition among junior secondary school students within a contextual and curriculum-based madrasah learning environment.

Based on this background, the present study seeks to analyze the effect of using Canva-based representative visual media on improving Arabic vocabulary mastery among seventh-grade students at MTs Negeri 2 Medan. Through a pre-experimental approach using a one-group pretest-posttest design, this study is expected to contribute both theoretically and practically to the development of Arabic language teaching methods grounded in visual media. The findings are also anticipated to serve as a reference for educators in implementing innovative, contextual, and student-responsive instructional strategies.

¹⁹ Muhammad Yusuf Salam and Adam Mudinillah, "Canva Application Development for Distance Learning on Arabic Language Learning in MTs Thawalib Tanjung Limau Tanah Datar," *JTP - Jurnal Teknologi Pendidikan* 23, no. 2 (August 28, 2021): 101–11, <https://doi.org/10.21009/jtp.v23i2.20650>.

Method

This study employed a quantitative approach with a pre-experimental design, specifically the one-group pretest-posttest model.²⁰ This design was selected to measure the effectiveness of an intervention involving the use of Canva-based representative visual media in improving students' Arabic vocabulary mastery.

The vocabulary materials used in this study were adapted from the seventh-grade Arabic textbook utilized at MTs Negeri 2 Medan and aligned with the curriculum issued by the Indonesian Ministry of Religious Affairs. The selected vocabulary items were drawn from themes that are contextually relevant to students' daily lives, such as family, school, objects, and everyday activities. The population in this study consisted of all seventh-grade students at MTs Negeri 2 Medan. The sample was selected using purposive sampling, with class VII C chosen as the study sample, comprising a total of 31 students. The visual media used during instruction were entirely designed using the Canva application. The design process was guided by Mayer's principles in Multimedia Learning Theory²¹ and Paivio's Dual Coding Theory, which emphasize that information presented both visually and verbally can enhance comprehension and memory retention.²² The posters followed key visual design principles, including simplicity, color contrast, text readability, and layout balance. Each poster featured a representative illustration, Arabic vocabulary, Latin transliteration, and simple contextual sentences.

The research instrument consisted of a multiple-choice vocabulary test comprising 25 items, designed to assess mastery of the taught material. The test items were developed by the researcher and underwent content validation through expert judgment by Arabic language expert. To assess its reliability, the instrument was piloted with 25 students outside the study sample. The reliability coefficient, calculated using the KR-20 formula, was 0.81, indicating a high level

²⁰ Todd D. Little et al., "The Retrospective Pretest–Posttest Design Redux: On Its Validity as an Alternative to Traditional Pretest–Posttest Measurement," *International Journal of Behavioral Development* 44, no. 2 (March 21, 2020): 175–83, <https://doi.org/10.1177/0165025419877973>.

²¹ Richard E. Mayer, "Multimedia Learning," 2002, 85–139, [https://doi.org/10.1016/S0079-7421\(02\)80005-6](https://doi.org/10.1016/S0079-7421(02)80005-6).

²² James M. Clark and Allan Paivio, "Dual Coding Theory and Education," *Educational Psychology Review* 3, no. 3 (September 1991): 149–210, <https://doi.org/10.1007/BF01320076>.

of internal consistency. Data analysis was conducted in two stages. First, descriptive analysis was used to examine the mean, standard deviation, and score range of the pretest and posttest results. Second, inferential analysis was performed using a paired sample t-test with the assistance of the latest version of SPSS to determine the statistical significance of the score differences before and after the intervention.

Results and Discussion

Following the design and implementation of the intervention, this study entered the analytical phase to evaluate the effectiveness of using Canva-based representative visual media in teaching Arabic vocabulary. The intervention consisted of instructional sessions conducted over three meetings with seventh-grade students at MTs Negeri 2 Medan. Each session utilized customized visual media designed via the Canva platform, featuring illustrations and contextual sentences aligned with the lesson themes.

During the instructional process, the teacher, who also acted as the researcher, facilitated learning using a participatory and visual approach aimed at strengthening students' memory and semantic associations related to the vocabulary being taught. To measure the impact of this intervention, a multiple-choice vocabulary test was administered both before (pretest) and after (posttest) the instruction. All quantitative data collected were then analyzed statistically using both descriptive and inferential methods to provide empirical evidence of the instructional media's effectiveness.

. Prior to conducting inferential analysis using a paired sample t-test, it was essential to test the assumptions of parametric statistical procedures, specifically normality and homogeneity. These tests ensure that the data approximates a normal distribution and that the variance between the two sets of data is homogeneous, which justifies the use of a t-test.

Normality tests were applied to both pretest and posttest data using the Kolmogorov-Smirnov and Shapiro-Wilk methods²³, which are widely used in educational research. The results are presented in Table 1:

²³ Nornadiah Mohd Razali and Bee Wah Yap, "Power Comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests," *Journal of Statistical Modeling and Analytics* 2, no. 1 (2011): 21–33.

Table 1. Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretest	.156	31	.054	.936	31	.064
posttest	.147	31	.087	.953	31	.189

Based on Table 1, the significance values for both tests exceeded the 0.05 threshold, indicating that the distribution of pretest and posttest scores was statistically normal. Subsequently, Levene's test was used to examine the homogeneity of variance. The results are shown in Table 2:

Table 2. Tests of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Based on Mean	.738	1	60	.394
Based on Median	.512	1	60	.477
Based on Median and with adjusted df	.512	1	58.509	.477
Based on trimmed mean	.751	1	60	.390

All significance values were above 0.05, indicating homogeneous variance between the datasets and satisfying the requirements for parametric testing. With normality and homogeneity assumptions met, a descriptive statistical analysis was conducted to determine the mean and spread of pretest and posttest scores. The results are presented in Table 3:

Table 3. Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 pretest	45.42	31	5.220	.938
posttest	81.03	31	6.194	1.112

As shown in Table 3, there was an increase in the mean score from pretest to posttest by 35.61 points. This improvement was accompanied by increases in both the maximum and minimum scores, indicating an overall enhancement in students' vocabulary mastery. To determine the statistical significance of this improvement, a paired sample t-test was conducted. The correlation and t-test results are presented in Tables 4 and 5.

Table 4. Paired Samples Correlations

	N	Correlation	Significance	
			One-Sided p	Two-Sided p
Pair 1 pretest & posttest	31	.366	.022	.043

The correlation indicates a significant positive relationship between pretest and posttest scores, though the strength of the correlation is moderate. This suggests that students with higher initial scores tended to show greater improvement as well.

Table 5. Paired Samples Test

		Paired Differences						Significance	
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	One-Sided p
			n	Mean	Lower	Upper			Two-Sided p
Pair 1	pretest - posttest	-35.613	6.479	1.164	-37.989	-33.236	-30.604	30	<.001

The paired sample t-test showed a significance value of < 0.001 , indicating a statistically significant difference ($p < 0.05$) between pretest and posttest scores. Thus, the null hypothesis (H_0), stating that there is no significant difference, was rejected, and the alternative hypothesis (H_a) was accepted. These findings reinforce that the use of contextual visual media via Canva significantly contributed to the enhancement of students' Arabic vocabulary mastery at the junior secondary level.

The analysis of vocabulary improvement in this study is not solely based on numerical differences between pretest and posttest scores, but also considers the pedagogical significance of the intervention using Canva-based representative visual media. This medium was not merely employed as a technical teaching aid, but also as an epistemological tool, semiotically and pedagogically designed, to facilitate the meaningful internalization of Arabic vocabulary.

As shown in Table 3, the mean pretest score was 45.42 with a standard deviation of 5.220. This reflects a relatively low level of vocabulary mastery at the beginning of the instructional process and pedagogically indicates a limited ability among students to recognize and use Arabic vocabulary in a functional and contextual manner. This value also reflects a lack of cognitive and emotional engagement in vocabulary acquisition, which has typically relied on conventional and textual methods without sufficient visual support.

After receiving the treatment in the form of Canva-based visual media instruction over three sessions (see Table 3), the students' posttest scores increased substantially, with the mean rising to 81.03 and a standard deviation of 6.194. This reflects an average gain of 35.61 points. The increase is not only statistically notable, but also indicates a fundamental shift in students' cognitive processes related to

vocabulary acquisition and retention. The visual media designed through Canva integrated illustrations, colors, symbols, and Arabic text within contextual sentence structures, theoretically reinforcing the dual coding mechanism in working memory, as outlined in the theories of Mayer and Paivio. According to these theories, information presented simultaneously through visual and verbal channels is more efficiently processed and remembered, as both systems reinforce each other within the cognitive storage framework.

To determine whether this improvement was statistically significant, a paired sample t-test was conducted. The test yielded a t-value of -30.604 and a significance level of < 0.001 . This is far below the standard alpha level of 0.05, indicating that the posttest improvement was not random but the direct result of the instructional intervention. Therefore, the null hypothesis (H_0), which posited no significant difference between pretest and posttest scores, was strongly rejected, and the alternative hypothesis (H_a) was accepted. These findings affirm that integrating representative visual media into Arabic vocabulary instruction contributes significantly to enhancing students' learning outcomes.

It is also worth noting the correlation result between the pretest and posttest scores, which showed a coefficient of 0.366 with a significance value of 0.043. While the correlation strength is moderate, this suggests a positive linear tendency between students' initial proficiency and their subsequent gains. In other words, students with higher initial vocabulary mastery still benefited from the media, while those with lower starting performance also experienced significant improvement. This indicates that the approach is inclusive and adaptable to diverse student learning capabilities.

Discussion

The results of this study provide a strong empirical basis for reflecting on and formulating meaningful pedagogical implications regarding the use of representative visual media, particularly those developed via Canva, in Arabic vocabulary instruction at the junior secondary school level. The significant increase in students' learning outcomes, as evidenced by the difference between pretest and posttest scores and the highly significant statistical result ($p < 0.001$), demonstrates that visually based instructional media not only enhance the aesthetic appeal of learning materials but also reinforce students'

cognitive structures in comprehending and retaining vocabulary in a deeper and more contextualized manner.

From a theoretical perspective, the success of this intervention can be explained through the integration of key principles from modern learning theories. First, Paivio's Dual Coding Theory posits that individuals process information through two complementary representational systems, verbal and visual.²⁴ When information is presented visually and linked directly to its verbal representation (such as images paired with vocabulary), the encoding process becomes more efficient, and retention is significantly enhanced. Canva allows educators to design visual representations that are not only aesthetically appealing but also semantically rich and aligned with the contextual demands of Arabic vocabulary instruction.²⁵

Second, this approach aligns with Richard E. Mayer's Multimedia Learning Theory, which highlights the importance of multimodal presentation in fostering meaningful learning.²⁶ Instruction that incorporates visual media alongside contextual text stimulates students' perceptual processing,²⁷ and activates linguistic and semantic schemata in working memory. In this regard, Canva-based visual media serve as a bridge between visual stimuli and the linguistic meaning that learners aim to internalize.²⁸

These findings have both theoretical and practical implications for the development of Arabic language instructional design grounded in visual media. The study provides strong empirical support for using Canva-based representative visuals as an effective pedagogical strategy. The significant gains observed in students' learning outcomes underscore the value of such media not only in presenting materials but

²⁴ Clark and Paivio, "Dual Coding Theory and Education."

²⁵ Lisa Traboco et al., "Designing Infographics: Visual Representations for Enhancing Education, Communication, and Scientific Research," *Journal of Korean Medical Science* 37, no. 27 (2022), <https://doi.org/10.3346/jkms.2022.37.e214>.

²⁶ Mayer, "Multimedia Learning."

²⁷ Dafa Nur Abtia Zayuda et al., "Eksistensi Mahārah Al- Kitābah Dalam Pembelajaran Bahasa Arab," *Counselia; Jurnal Bimbingan Konseling Pendidikan Islam* 4, no. 2 (September 30, 2023): 164–80, <https://doi.org/10.31943/counselia.v4i2.117>.

²⁸ Eleni Meletiadou, "Using Educational Digital Storytelling to Enhance Multilingual Students' Writing Skills in Higher Education," *IAFOR Journal of Education* 10, no. 2 (August 27, 2022): 111–30, <https://doi.org/10.22492/ije.10.2.06>.

also in strengthening cognitive frameworks for vocabulary acquisition.²⁹

Moreover, the substantial improvement in test scores reflects success not only in quantitative terms but also in terms of learning engagement. Numerous previous studies have affirmed that active student participation in visual learning processes contributes to improved information retention. Activities such as associating words with images,³⁰ matching vocabulary to corresponding visuals, and revisiting classroom-displayed visual content function as forms of cognitive rehearsal that reinforce long-term memory storage.³¹ Therefore, this analysis presents compelling evidence that Canva-based visual media are not merely technological innovations in Arabic instruction but constitute a pedagogical intervention capable of transforming student learning dynamics, from passive to active, from text-oriented to multimodal, and from individualistic to collaborative and contextual. This approach holds potential for broader application and development across other language learning domains, particularly in multicultural and multilingual educational settings such as those found in Indonesia.

The practical implication of this study is the urgent need to reposition Arabic language instruction away from rote memorization and mechanistic repetition³² toward multimodal and contextual approaches that are learner-centered.³³ Teachers should be encouraged

²⁹ Muchsinul Khuluq et al., "Mobile-Assisted Language Learning Apps: The Analysis of Duolingo," *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 12, no. 2 (December 5, 2024): 229–46, <https://doi.org/10.23971/altarib.v12i2.8806>.

³⁰ Anisa Verawati et al., "Designing Android Learning Media to Improve Problem-Solving Skills of Ratio," *Advances in Mobile Learning Educational Research* 2, no. 1 (2022): 216–24, <https://doi.org/10.25082/AMLER.2022.01.005>.

³¹ Renni Hasibuan, Mamluatul Hasanah, and Faisol, "Improving Balaghah Mastery Through Teams Games Tournaments with Crossword Puzzle Media in Higher Education," *Al-Lisan* 9, no. 1 (February 29, 2024): 33–50, <https://doi.org/10.30603/al.v9i1.4520>.

³² Husnaini Jamil and Nur Agung, "Tantangan Pembelajaran Bahasa Arab Di Era Society 5.0: Analisis Pembelajaran Bahasa Arab Berbasis Aplikasi Interaktif," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 3, no. 1 (January 24, 2022): 38–51, <https://doi.org/10.19105/ajpba.v3i1.5536>.

³³ Nurul Huda, Isnaini Maulidia Annisa, and Muhammad Nuruzzaman Syam, "Writing Skills Teaching Methods for Elementary School Students: Scramble in Connecting Arabic Letters," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (August 7, 2024): 268–87, <https://doi.org/10.19105/ajpba.v5i2.15084>.

to serve as instructional designers by leveraging digital platforms like Canva, to develop learning materials that simultaneously engage students' visual, emotional, and cognitive faculties. The use of Canva is especially relevant to today's digital-native Generation Z, who are accustomed to visual information, image-based communication, and interactive learning.³⁴

Furthermore, Canva is a flexible instructional tool that can be adapted to varying teacher competencies.³⁵ Its intuitive interface allows educators from diverse technological backgrounds to design media quickly and effectively without requiring advanced graphic design skills. On the other hand, students' active involvement in engaging with and responding to these media contributes to the formation of a more open, collaborative, and experiential learning ecology.

From a policy perspective, the findings of this study encourage educational institutions, particularly madrasahs and Islamic-based schools, to begin integrating digital literacy into professional development programs for Arabic language teachers. The implementation of instructional design training that emphasizes the creation of Canva-based visual media can serve as a strategic initiative to promote more contextual, engaging, and relevant Arabic instruction for the demands of 21st-century education.

Conclusion

Based on the results of data analysis and the preceding discussion, it can be concluded that the use of Canva-based representative visual media has proven to be effective in enhancing Arabic vocabulary mastery among seventh-grade students at MTs Negeri 2 Medan. The increase in the average score from 45.42 on the pretest to 81.03 on the posttest, with a gain of 35.61 points and a significance value of < 0.001 in the paired sample t-test, indicates a statistically significant impact on students' lexical abilities following the implementation of visual media-based instruction. The media designed using Canva functioned not merely as aesthetic teaching aids

³⁴ Nely Rahmawati Zaimah et al., "Harnessing Gemini for Arabic Mastery: Educators' and Learners' Views," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (July 31, 2024): 166–88, <https://doi.org/10.19105/ajpba.v5i2.14808>.

³⁵ Mohzana Mohzana, "Evaluation of the Use of Gamification in Language Learning for Students in Indonesia," *International Journal of Language and Ubiquitous Learning* 1, no. 4 (January 4, 2024), <https://doi.org/10.70177/ijlul.v1i4.681>.

but also as effective pedagogical instruments for presenting vocabulary in a contextualized, multimodal, and cognitively and affectively engaging manner. The practical implication of these findings suggests the need to reposition Arabic language teaching strategies toward more visually oriented, participatory, and digitally literate approaches. For future researchers, the results of this study provide a strong foundation for further investigation into the effectiveness of digital visual media in teaching other language skills. Such research should consider broader sample sizes, more rigorous experimental designs, and long-term impact measurements related to vocabulary retention and students’ communicative abilities in real-life contexts.

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