

Effectiveness of Comic-Based Learning Media in Enhancing Arabic Language Outcomes of Grade V Students in Indonesian Islamic Primary Schools

Fauzan Kamal Fahmi¹, Ahmad Nur Mizan², Zulhanan³

¹⁻⁵ Universitas Islam Negeri Raden Intan Lampung, Lampung, Indonesia

Abstract

This study investigates the effectiveness of comic-based learning media in improving Arabic language learning outcomes among Grade V students of MIN 3 Pringsewu. The research adopts a quantitative approach using a pre-experimental Intact Group Comparison design involving two groups: an experimental class receiving instruction through comic media (n = 31) and a control class taught through conventional textbook based methods (n = 28). Data were collected through pretests and posttests, supported by observation, interviews, and documentation, and analyzed using SPSS version 24, including instrument validity and reliability testing, normality and homogeneity tests, N-Gain Score analysis, and paired samples t-test. The results show a significant improvement in learning performance in the experimental group, whose mean score increased from 57.87 (pretest) to 78.51 (posttest), compared with an increase from 55.57 to 61.92 in the control group. The N-Gain Score of 61.43% for the experimental group (moderately effective) and 16.59% for the control group (ineffective), together with a significant paired samples t-test result (Sig. = 0.000 < 0.05), confirms that comic-based media effectively enhance students' Arabic learning outcomes. These findings demonstrate that multimodal visual-narrative instructional strategies increase learner engagement, motivation, and comprehension, offering a pedagogically valuable alternative to traditional text-dominant instruction. The implications of this study suggest that comic media can be integrated into primary Islamic education to foster more interactive, meaningful, and student-centered Arabic language learning experiences, while future studies may examine digital comic innovations and long-term retention effects.

ARTICLE HISTORY

Received : 29 June 2025

Revised : 25 July 2025

Accepted : 20 August 2025

KEYWORDS

Arabic language learning; comic-based media; learning outcomes; multimodal instruction; primary education.

PUBLISHER'S NOTE

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike (CC BY 4.0) license



CORRESPONDING AUTHOR

Fauzan Kamal Fahmi, Universitas Islam Negeri Raden Intan Lampung, Lampung, Indonesia. Email: fauzankamal02@gmail.com

Introduction

Language plays an essential role in human communication, functioning as a primary medium for expressing ideas, thoughts, and emotions across cultural and social contexts. It enables individuals to construct meaning and engage in interpersonal interaction through spoken, written, and symbolic forms of communication (Alejandro, 2024; Liliweri et al., 2023; Meylani, 2024). Among the diverse global languages, Arabic holds a significant position due to its linguistic, cultural, and religious importance. Arabic is the liturgical language of the Qur'an, the principal source of Islamic teachings, and is widely used across the Middle East, North Africa, and various Muslim-majority societies worldwide (Khairanis & Aldi, 2025; Rusydi Amar, 2023; Yusuf Abdullahi et al., 2023). Therefore, the

mastery of Arabic is fundamental not only for religious comprehension but also for academic and global communication purposes, especially in Islamic educational institutions.

In the Indonesian educational context, Arabic language learning is integrated into formal and informal institutions as a means of developing communicative competencies that encompass four essential language skills listening (*istimā'*), speaking (*kalām*), reading (*qirā'ah*), and writing (*kitābah*). These competencies support students in understanding and conveying information effectively through spoken and written expressions (Primadana et al., 2024; Sultan & Yahya, 2024; Wahyuni et al., 2023). However, despite its curricular importance, Arabic remains a challenging subject for many students in primary education. Learning challenges are often associated with the gap between students' native language and Arabic linguistic structures, limited vocabulary mastery, and insufficient instructional engagement, leading to reduced motivation and low performance outcomes (Abdeldeen & Fu, 2022; Nafilah et al., 2024; Norlaila et al., 2025; Sultan & Yahya, 2024).

Traditional teaching approaches that rely heavily on lecture-based instruction and textbook-centered learning are frequently reported as ineffective in fostering student engagement. Many teachers still implement conventional strategies and limited learning media, resulting in passive classroom environments and minimal student (Aji & Khan, 2019; Dietrich & Evans, 2022; Kozanitis & Nenciovici, 2023). As a consequence, students often perceive Arabic as a difficult and monotonous subject, which negatively affects learning motivation and academic achievement. Such instructional limitations highlight the necessity for innovative pedagogical models and media that are engaging, contextual, and visually stimulating to enhance comprehension and performance.

One promising alternative to increase learning motivation and conceptual understanding is the use of educational comics. Comics integrate visual illustrations with narrative text, allowing learners to contextualize information more effectively by stimulating visual processing and facilitating memory retention (Maryani & Amalia, 2018; Priadi et al., 2023; Utami et al., 2024). Previous research has demonstrated that comic-based learning media can improve student engagement, support vocabulary acquisition, and enhance performance outcomes across various subjects at the primary education level (C. P. Pratiwi et al., 2025; N. K. D. Pratiwi & Bayu, 2024; Yuliani & Setiawan, 2024). The integration of visual elements with textual content makes learning more interactive and enjoyable, thereby supporting students' cognitive and emotional involvement in the learning process.

Despite the growing body of research on comic media, most studies have focused on thematic subjects or general literacy skills rather than specifically addressing Arabic language learning in madrasah-based contexts. Previous studies have primarily explored the effectiveness of comics in improving general learning outcomes, yet limited empirical evidence is available regarding their effectiveness for Arabic learning, particularly at the elementary Islamic education level where students require strong foundational literacy (Bahri et al., 2024; Izzah & Ma'sum, 2021; Maulidi et al., 2025). Additionally, few studies have examined the effect of comic-based media using rigorous experimental designs with statistical validation, such as N-Gain analysis and hypothesis testing, to measure learning improvement quantitatively.

Based on the gap identified, there is a need for empirical evidence regarding the effectiveness of comic-based instructional media in enhancing Arabic language learning outcomes among primary students in madrasah settings using robust statistical evaluation. Therefore, this study aims to analyze the effectiveness of comic-based learning media in improving Arabic language learning

outcomes among Grade V students at MIN 3 Pringsewu using a quantitative experimental approach. Specifically, this research evaluates the influence of comic media on students' performance improvement as measured through pretest and posttest score comparisons to determine whether the implementation significantly affects learning achievement.

Methods

This study employed a quantitative research approach using a pre-experimental design, specifically the Intact Group Comparison model, which involves comparing an experimental group receiving treatment and a control group receiving conventional instruction. This design was selected because it allows researchers to examine the causal effect of comic-based instructional media on students' Arabic language learning outcomes by comparing changes in performance before and after the intervention (Koderi et al., 2023; Rokmana et al., 2025; Sari et al., 2023; Sufian et al., 2024; Suhartawan et al., 2024; Waluyo et al., 2025). The population in this study consisted of all fifth-grade students at MIN 3 Pringsewu during the 2024/2025 academic year, comprising 59 students distributed across two classes. A total sampling technique was utilized, in which all members of the population were included as research samples to ensure comprehensive data representation and minimize sampling bias (Cohen et al., 2007; Fadilla et al., 2022; Soesana & dkk, 2023). Class VA (n=31) served as the experimental group instructed using comic-based media, while class VB (n=28) functioned as the control group taught through conventional textbook-based learning.

Data collection involved pretests and posttests to measure learning outcomes, supported by observation, interviews, and documentation to validate the instructional process and classroom dynamics. The test instrument consisted of multiple-choice and essay questions that had undergone validity and reliability testing prior to administration. Content validity was examined using Pearson Product-Moment correlation to determine the suitability of test items in measuring learning objectives, with items meeting the significance threshold of $p < 0.05$ considered valid (Creswell & Creswell, 2022). Reliability testing employed Cronbach's Alpha with a criterion value of $\alpha > .70$, indicating internal consistency of test items and reliable measurement stability across administrations. Additional psychometric assessments included item difficulty index analysis to classify question difficulty levels and discrimination index analysis to assess the ability of test items to differentiate between high and low achievers.

Before hypothesis testing, prerequisite statistical analyses were conducted, including normality testing using the Kolmogorov Smirnov procedure and homogeneity testing using Levene's test to confirm the assumption of equal variances. Data analysis was performed using SPSS version 24. The effectiveness of comic-based learning media was determined using the N-Gain score formula to evaluate the magnitude of learning improvement from pretest to posttest. The paired samples t-test was used to analyze significance differences within groups, while independent samples analysis and regression-based calculations reinforced hypothesis testing criteria. Decisions were based on significance levels of $p < 0.05$, supporting the acceptance or rejection of research hypotheses (Bambang et al., 2023; Muin, 2023; Riyanto & Aglis Andhita Hatmawan, 2020). The overall methodological framework was designed to obtain valid and reliable quantitative evidence regarding the impact of comic-based learning media on Arabic language learning outcomes.

Results and Discussion

Result

The results of the data analysis demonstrate that comic-based learning media significantly improved students' Arabic language learning outcomes. A comparison of pretest and posttest performance revealed substantial differences between the experimental and control groups. Students in the experimental class showed an increase in their mean score from 57.87 to 78.51, while the control class increased from 55.57 to only 61.92. The calculated N-Gain Score indicated that the experimental class achieved an average improvement rate of 61.43%, categorized as moderately effective, whereas the control class obtained 16.59%, categorized as ineffective. These results are presented in Table 1.

The results of the data analysis demonstrate that comic-based learning media significantly improved students' Arabic language learning outcomes. A comparison of pretest and posttest performance revealed substantial differences between the experimental and control groups. Students in the experimental class showed an increase in their mean score from 57.87 to 78.51, while the control class increased from 55.57 to only 61.92. The calculated N-Gain Score indicated that the experimental class achieved an average improvement rate of 61.43%, categorized as moderately effective, whereas the control class obtained 16.59%, categorized as ineffective. These results are presented in Table 1.

The results of the data analysis demonstrate that comic-based learning media significantly improved students' Arabic language learning outcomes. A comparison of pretest and posttest performance revealed substantial differences between the experimental and control groups. Students in the experimental class showed an increase in their mean score from 57.87 to 78.51, while the control class increased from 55.57 to only 61.92. The calculated N-Gain Score indicated that the experimental class achieved an average improvement rate of 61.43%, categorized as moderately effective, whereas the control class obtained 16.59%, categorized as ineffective. These results are presented in Table 1.

Tabel 1. N-Gain Score Results for Experimental and Control Groups

Group	Mean N-Gain Score	Category
Experimental	61.43%	Moderately Effective
Control	16.59%	Ineffective

The paired samples t-test further confirmed a statistically significant difference in the experimental group between pretest and posttest results (Sig. = 0.000 < 0.05; t-count = 5.636 > t-table = 2.045), indicating that the treatment exerted a significant influence on learning outcomes. Meanwhile, the control group results did not demonstrate substantial statistical improvement (Sig. > 0.05). The normality test indicated that posttest scores in the experimental group were normally distributed (Sig. = 0.826 > 0.05), while Levene's test revealed that variance between experimental and control posttest results was not homogeneous (Sig. = 0.01 < 0.05), suggesting difference in outcome distribution between groups. Collectively, the quantitative findings indicate that comic media implementation plays a meaningful role in promoting improved Arabic learning performance among Grade V students.

Discussion

The significant increase in the experimental group's learning outcomes suggests that comic-based instructional media effectively enhance students' comprehension, engagement, and academic results in Arabic language learning. The improvement aligns with previous research highlighting the

importance of integrating context-based comic media to enhance learning motivation and support the comprehension of abstract scientific concepts. Similar findings were reported by Melliyaniti & Suniasih (2022), who demonstrated that context-based comics significantly improved students' learning outcomes in natural science by increasing both interest and cognitive clarity. Likewise, Mahmudah et al., (2024) identified that comics enhance Arabic speaking skills by providing contextual language exposure and stimulating oral expression practices. Sakka et al., (2024) also reported that the use of interactive learning media helps increase students' active involvement and Arabic achievement, strengthening the interpretation of the present results.

Furthermore, studies conducted by Teng (2023) and Ilham et al., (2023) confirmed that multimodal learning media contribute positively to vocabulary acquisition and language skill development, which resonates with the current findings that comic media allowed students to better interpret vocabulary and apply it in meaningful situations. Additionally, Moser & Lewalter (2024) emphasized the role of visual instructional approaches in enhancing student comprehension and internal motivation, supporting the direction and outcomes of this research.

The novelty of the present study lies in its application of comic media specifically within the context of Arabic language learning at the elementary madrasah level using quantitative experimental measurements validated through statistical reliability, validity, N-Gain effectiveness analysis, and hypothesis testing an empirical approach that previous comic-related studies rarely adopted. Whereas prior studies mostly examined the general learning impact of comics in non-language contexts, this study demonstrates its effectiveness in improving foundational Arabic literacy, addressing a gap in instructional media innovation within Islamic education.

The findings of this research also carry practical implications. For educators, comics may serve as an accessible pedagogical tool that fosters active learning, vocabulary development, and conceptual understanding. For curriculum designers, integrating comics into Arabic learning modules may broaden multimodal instructional strategies aligned with modern pedagogical frameworks. Theoretically, the study reinforces dual-coding theory and cognitive load theory, suggesting that combining verbal and visual elements strengthens working memory and facilitates knowledge retention.

Despite these contributions, the research has limitations. The pre-experimental design without random assignment limits generalizability and internal control over confounding variables. The intervention duration was relatively short, limiting the ability to assess long-term retention. Furthermore, learning outcomes were assessed primarily based on cognitive performance rather than incorporating affective or psychomotor measures. Future studies should adopt randomized controlled or quasi-experimental models, examine long-term effects, integrate digital comics, and explore broader skill dimensions such as speaking proficiency and learning motivation.

Conclusion

The findings of this study demonstrate that the integration of comic-based learning media has a significant positive effect on improving Arabic language learning outcomes among Grade V students at MIN 3 Pringsewu. Statistical analysis using N-Gain Score, which revealed a gain of 61.43% for the experimental group compared with 16.59% for the control group, along with the results of the paired samples t-test (Sig. = 0.000 < 0.05), indicates that students taught using comic media experienced substantially greater improvement than those instructed with conventional methods. These results

provide empirical evidence that multimodal visual narrative media can increase learner engagement, comprehension, vocabulary acquisition, and motivation in Arabic learning contexts, addressing challenges widely reported in primary Islamic education. The study contributes a novel perspective to the field by applying comic-based pedagogy specifically to Arabic language instruction at the elementary madrasah level and validating its effectiveness through rigorous statistical methods. Therefore, comic media can be considered a practical and innovative alternative learning resource that educators and curriculum developers may integrate to enhance active learning, support student-centered pedagogy, and reduce learning barriers associated with traditional textbook-based instruction. Future research is recommended to explore long-term impacts, broader population samples, and digital or interactive comic formats to maximize pedagogical innovation and sustain learning outcomes across diverse educational settings.

References

- Abdeldeen, M., & Fu, Y.-H. (2022). The challenges of Arabic language acquisition to the non-native speakers in National Chengchi University, Taiwan: From the perspective of the current students. *Dirasat: Human and Social Sciences*, 49(3). <https://doi.org/10.35516/hum.v49i3.1342>
- Aji, C. A., & Khan, M. J. (2019). The impact of active learning on students' academic performance. *Open Journal of Social Sciences*, 7(3), 204–211. <https://doi.org/10.4236/jss.2019.73017>
- Alejandro, J. (2024). The role of language in thought formation and personality. *International Journal of Multidisciplinary Sciences*, 2(4), 356–367. <https://doi.org/10.37329/ijms.v2i4.3759>
- Bahri, M. A., Haeriyah, H., Baso, Y. S., & Aggussalim, A. (2024). The effectiveness of digital comics in Arabic vocabulary teaching. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 16(2), 421. <https://doi.org/10.24042/albayan.v16i2.24197>
- Bambang, D. A., Jarkawi, S., Primadewi, K., Habibah, U., Lounggina, T., Peny, L., Pratama, K., Derry, R., Wiena, N., Abdul, S., Zulfiah, W., Bambang, L., Firdaus, S., & Dharta, Y. (2023). *Metode Penelitian Kuantitatif*. Penerbit: Yayasan Penerbit Muhammad Zain.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge.
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Dietrich, H., & Evans, T. (2022). Traditional lectures versus active learning – A false dichotomy? *STEM Education*, 2(4), 275–292. <https://doi.org/10.3934/steme.2022017>
- Fadilla, Z., Ketut Ngurah Ardiawan, M., Eka Sari Karimuddin Abdullah, M., Jannah Ummul Aiman, M., & Hasda, S. (2022). *Metodologi Penelitian Kuantitatif*. Penerbit Muhammad Zaini.
- Ilham, M., Rahman, F., Sari, D. D., & Annisaturrahmi, A. (2023). Enhancing preschool English vocabulary through multimedia tools: Insights from a mixed-methods study. *Al-Athfal: Jurnal Pendidikan Anak*, 9(2), 93–102. <https://doi.org/10.14421/al-athfal.2023.92-02>
- Izzah, M. A., & Ma'sum, A. (2021). Pengembangan komik digital sebagai media pembelajaran bahasa Arab Maharah Qira'ah untuk siswa kelas X MA Almaarif Singosari. *JoLLA: Journal of Language, Literature, and Arts*, 1(8), 1081–1094. <https://doi.org/10.17977/um064v1i82021p1081-1094>
- Khairanis, R., & Aldi, M. (2025). The role of Arabic in strengthening cultural identity in the digital age. *Sosial Dan Humaniora*, 1(3), 119–130.
- Koderi, Sufian, M., & Erlina. (2023). Developing Lampung local wisdom film of Arabic communication skills for Madrasah Tsanawiyah students. *International Journal of Information and Education Technology*, 13(12), 2004–2013. <https://doi.org/10.18178/ijiet.2023.13.12.2015>
- Kozanitis, A., & Nenciovici, L. (2023). Effect of active learning versus traditional lecturing on the learning achievement of college students in humanities and social sciences: A meta-analysis. *Higher Education*, 86(6), 1377–1394. <https://doi.org/10.1007/s10734-022-00977-8>
- Liliwari, A., Widowati, D., & Manafe, Y. D. (2023). Construction of meaning in verbal communication. *Advances in Social Sciences Research Journal*, 10(6). <https://doi.org/10.14738/assrj.106.14245>
- Mahmudah, M., Nurhanifansyah, N., & Khalid, S. M. S. bin. (2024). Psycholinguistic approaches to enhancing Arabic speaking proficiency through comic strips. *Arabiyatuna: Jurnal Bahasa Arab*, 8(2), 805–826.

<https://doi.org/10.29240/jba.v8i2.11349>

- Maryani, I., & Amalia, L. (2018). The development of science comic to improve student's understanding in elementary school. *Jurnal Inovasi Pendidikan IPA*, 4(1), 75–82. <https://doi.org/10.21831/jipi.v4i1.21076>
- Maulidi, Mufidah, M. L., & Rina Dian Rahmawati. (2025). The development of comic learning media featuring the exemplary KH. A. Wahab Hasbullah to improve Arabic writing skills. *Asalibuna*, 8(2), 70–88. <https://doi.org/10.30762/asalibuna.v8i02.3172>
- Melliyanti, N. M. S., & Suniasih, N. W. (2022). Kelayakan dan efektivitas media komik berbasis kontekstual pada muatan IPA materi sumber daya alam. *Mimbar Ilmu*, 27(1), 124–133. <https://doi.org/10.23887/mi.v27i1.44587>
- Meylani, A. (2024). The role of Indonesian as a communication tool in learning. *Journal of Education, Linguistics, Literature, and Art*, 2(2), 58–64. <https://doi.org/10.62568/ella.v2i2.128>
- Moser, S., & Lewalter, D. (2024). The impact of instructional support via generative learning strategies on the perception of visual authenticity, learning outcomes, and satisfaction in AR-based learning. *European Journal of Psychology of Education*, 39(4), 3437–3462. <https://doi.org/10.1007/s10212-024-00813-w>
- Muin, A. (2023). *Metode Penelitian Kuantitatif*. Literasi Nusantara Abadi.
- Nafilah, S. A., Hamidi, S. R., Maulidiyah, R. L., Faruq, M., & Mufidah, N. (2024). Arabic language learning methods in the digital era. *Ijaz Arabi Journal of Arabic Learning*, 7(1). <https://doi.org/10.18860/ijazarabi.v7i1.23183>
- Norlaila, N., Muradi, A. R., Oensyar, M. K. R., & Arifin, A. (2025). Students' difficulties in Arabic: A study of the background of students' Arabic language education. *Ijaz Arabi Journal of Arabic Learning*, 8(2). <https://doi.org/10.18860/ijazarabi.v8i2.32092>
- Pratiwi, C. P., Irma, C. N., Nur, P., & Kumalasari, I. (2025). EduBasic Journal: Jurnal Pendidikan Dasar The effectiveness of local culture-based digital comic on elementary school students' story reading skills. 7(1), 115–128.
- Pratiwi, N. K. D., & Bayu, G. W. (2024). Augmented reality-based comic media: A metacognitive approach to enhance cultural literacy and reading engagement in elementary education. *International Journal of Elementary Education*, 8(3), 536–546. <https://doi.org/10.23887/ijee.v8i3.89796>
- Priadi, M. A., Trisna Dewi, S. K., & Wisnu Prabowo, G. C. (2023). Improving students' scientific literacy skills using inquiry-based e-comic at the tenth grader in Lampung Province. *Biosfer: Jurnal Tadris Biologi*, 14(1), 99–110. <https://doi.org/10.24042/biosfer.v14i1.17607>
- Primadana, R. J., Maswani, M., Wahab, M. A., Fudhaila, A., & Raswan, R. (2024). Development of listening and speaking skills teaching materials based on CEFR level. *Arabiyatuna: Jurnal Bahasa Arab*, 8(2), 559–578. <https://doi.org/10.29240/jba.v8i2.10904>
- Riyanto, S., & Aglis Andhita Hatmawan. (2020). *Metode Riset Penelitian Kuantitatif Di Bidang Manajemen, Teknik, Pendidikan dan Eksperimen*. DEEPUBLISH.
- Rokmana, I., Akmansyah, M., & Sufian, M. (2025). Enhancing Arabic vocabulary learning outcomes through cooperative learning model STAD with video media assistance. *Ajamiy: Jurnal Bahasa Dan Sastra Arab*, 14(1), 97–112.
- Rusydi Amar, F. (2023). The urgency and functions of Arabic language learning in educational institutions. *International Journal of Language and Ubiquitous Learning*, 1(2), 95–103. <https://doi.org/10.70177/ijlul.v1i2.622>
- Sakka, A., Hula, I. R. N., Una, H., Doni, C. P., Abdelmannan, Y., & Godat, M. (2024). *Development of interactive learning media using Te*. 7(3).
- Sari, T. O., Andriani, L., Andra, V., & Sufian, M. (2023). Performance and meaning in wedding pantun: An ethnopoetic perspective. *JPI: Jurnal Pustaka Indonesia*, 3(1), 51–60. <https://siducat.org/index.php/jpi/article/view/441>
- Soesana, A., & dkk. (2023). *Buku Metodologi Penelitian Kuantitatif*. Yayasan Kita Menulis.
- Sufian, M., Erlina, & Octariani, S. (2024). Gendered parenting and language achievement: A comparative study of children from single-mother and single-father families in Arabic language learning. *Women, Education, and Social Welfare*, 1(2), 110–120. <https://doi.org/10.70211/wesw.v1i2.296>
- Suhartawan, B., Daawia, Deni, A. R. N. A., Iriyanto, S. M., Sopiha, S., Naryanti, I., Vanchapo, A. R., Defitri, S. Y., & Barsei, A. N. (2024). *Metodologi Penelitian*. Cendikia Mulia Mandiri.
- Sultan, M., & Yahya, M. (2024). Developing reading Arabic skills among university students in South Sulawesi.

Langkawi: Journal of The Association for Arabic and English, 1.
<https://doi.org/10.31332/lkw.v0i0.7040>

- Teng, M. F. (2023). The effectiveness of multimedia input on vocabulary learning and retention. *Innovation in Language Learning and Teaching*, 17(3), 738–754. <https://doi.org/10.1080/17501229.2022.2131791>
- Utami, C. T., Kawuryan, S. P., Astuti, P. P., & Sugara, U. (2024). Enhancing student's interest in learning and science problem-solving skills through educational comics. *MIMBAR PGSD Undiksha*, 12(2), 195–204. <https://doi.org/10.23887/jjpsd.v12i2.81205>
- Wahyuni, S., Ritonga, M., & Afrianti, W. (2023). Systematic review of learning method for teaching Arabic listening and speaking skills. *Al-Hayat: Journal of Islamic Education*, 7(1), 30. <https://doi.org/10.35723/ajie.v7i1.321>
- Waluyo, S. D., Rustanto, A. E., Winanti, Y. K., Onn, C. W., Sufian, M., & Mesina, J. R. (2025). Digital transformation in teacher performance assessment: Development and implementation of E-PKG system for enhancing vocational education quality and industry alignment. *Journal of Educational Technology and Learning Creativity*, 3(2), 348–366. <https://doi.org/10.37251/jetlc.v3i2.2490>
- Yuliani, E., & Setiawan, D. (2024). Development of flipbook-based digital comics to improve learning outcomes on simple comic material. *Research and Development in Education (RaDEn)*, 4(1), 219–236. <https://doi.org/10.22219/raden.v4i1.32280>
- Yusuf Abdullahi, A., Zubairu Achara, I., & Usman, M. (2023). Arabic as an international language for renaissance: Impact on the Muslim Ummah. *Arabic Language, Literature & Culture*. <https://doi.org/10.11648/j.allc.20230801.11>