### ACQUIRING ENGLISH VOCABULARY USING STORYTELLING

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ABSTRAK. Penguasaan kosakata merupakan aspek penting dalam pembelajaran Bahasa Inggris, namun banyak siswa mengalami kesulitan dalam menguasainya sebab metode pembelajaran yang monoton dan kurang melibatkan aspek emosional serta kognitif siswa. Meskipun berbagai pendekatan telah digunakan, masih terdapat kesenjangan dalam penerapan strategi yang inovatif dan menyenangkan, khususnya bagi siswa sekolah menengah pertama (SMP). Penelitian ini bertujuan untuk mengetahui efektivitas metode bercerita (*storytelling*) dalam meningkatkan penguasaan kosakata siswa kelas 7 di SMP Muhammadiyah 5 Tulangan. Penelitian ini menggunakan pendekatan kuantitatif dengan desain pre-eksperimental, melalui tiga tahap: tes awal, perlakuan (*treatment*) dengan *storytelling*, dan tes akhir. Data yang diperoleh tidak berdistribusi normal, sehingga dianalisis menggunakan Wilcoxon Signed-Rank Test. Hasil pengujian menunjukkan adanya peningkatan yang signifikan pada hasil tes akhir dibandingkan tes awal dengan nilai signifikansi sebesar (p = 0,001). Strategi *storytelling* terbukti efektif dalam menciptakan suasana belajar yang kontekstual, menyenangkan, serta mampu meningkatkan motivasi dan keterlibatan siswa. Implikasi dari penelitian ini menunjukkan bahwa *storytelling* dapat dijadikan strategi alternatif yang interaktif untuk meningkatkan penguasaan kosakata siswa dalam pembelajaran Bahasa Inggris di tingkat SMP.

Kata kunci: penguasaan kosakata; bercerita; SMP

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ABSTRACT. Vocabulary acquisition is a crucial component of English language learning; however, many students struggle to master it due to conventional teaching methods that fail to engage their emotional and cognitive faculties. Despite the application of various instructional strategies, there remains a notable lack of innovative and enjoyable approaches specifically for junior high school learners. This study investigates the effectiveness of the storytelling method in improving vocabulary mastery among 7th-grade students at SMP Muhammadiyah 5 Tulangan. Employing a quantitative methodology with a pre-experimental design, the research was conducted through three stages: a pre-test, an intervention using storytelling, and a post-test. The Wilcoxon Signed-Rank Test was used for analysis as the data did not follow a normal distribution. The findings revealed a statistically significant improvement in vocabulary scores post-intervention (p = 0.001), indicating the method's efficacy. Storytelling fostered a more contextual and enjoyable learning environment and increased their motivation and participation. These results suggest that storytelling was a viable and interactive pedagogical alternative for improving vocabulary mastery in junior high school English education.

Keywords: Vocabulary acquisition; storytelling; Junior High School

## INTRODUCTION

English is a gateway to the expansive domain of global knowledge and achievement. Mastering this language allows learners to access recent research, books, and other academic resources that may not be available in other languages. This fact strengthens their knowledge and skill sets across various disciplines. A critical aspect of using English effectively lies in vocabulary acquisition. The more words learners know, the better they can understand complex texts, express ideas precisely, and engage in meaningful discussions (Susanto, 2017). Academic vocabulary is essential for general English learners, while technical vocabulary is crucial for those focusing on specialized fields. Intensive vocabulary instruction significantly benefits students and should therefore be addressed explicitly. Among the various

approaches designed to boost vocabulary learning, storytelling has emerged as a particularly impactful strategy.

Several experts support storytelling as a pedagogical method. Bruner argues that storytelling is a natural way for humans to understand and interpret the world. This narrative approach helps learners construct meaning from content, making it easier to process and retain new information. Storytelling facilitates deeper connections between vocabulary and relevant contexts in language learning. Ellis and Brewster also highlight the value of storytelling in English instruction, especially for young EFL learners. They emphasize that stories provide natural and repetitive language exposure, improving vocabulary acquisition and student motivation (Ellis & Brewster, 2014). As such, storytelling serves as a content delivery tool and a

means of creating an engaging and interactive classroom environment. Studies show that storytelling increases student engagement in learning (Hofman-Bergholm, 2022). It stimulates their imagination and provides a fun, meaningful context that supports vocabulary understanding, sentence construction, and verbal expression (Rifiyanti & Hidayat, 2024). This method promotes cognitive and emotional involvement, making language acquisition more enjoyable and effective.

Rifiyanti and Hidayat (2024) found that storytelling helps students acquire new vocabulary and understand how to use words appropriately in sentences. However, some challenges persist. Individual differences in comprehension can hinder students' ability to follow storylines or grasp complex vocabulary and sentence structures. Previous research confirms storytelling's effectiveness in building vocabulary among young EFL learners (Al Zoubi, 2021). Beyond vocabulary, it also contributes to developing listening, reading, and writing skills. Still, challenges arise when story language exceeds comprehension students' levels, potentially diminishing instructional effectiveness. This study addresses these issues by employing older student participants and applying quantitative research methods. Its novelty lies in integrating storytelling to enhance vocabulary learning in a meaningful, studentcentered, and interactive way. This approach accommodates diverse learning preferences and explores storytelling's dual function: fostering vocabulary development and emotional-cognitive thereby engagement, improving language comprehension and retention.

The use of storytelling as a learning method is supported by several expert theories. Bruner says that humans naturally understand the world through storytelling. The process of storytelling thinking allows learners to construct meaning through stories, making the information conveyed easier to understand and remember. In the context of language learning, this approach makes it easier for students to connect new vocabulary with relevant and meaningful contexts.

Vocabulary plays a fundamental role in language mastery. To fully benefit from English, learners must build a strong vocabulary base. Vocabulary instruction should thus serve as the starting point in language education. Teachers must adopt innovative and creative strategies by providing storytelling as a prime example to deliver high-quality instruction (Puntadewi & Engliana, 2018).

However, it was also found that the challenges faced by previous researchers were often that some stories might use language or sentence structures that are too complex for young students to understand, causing confusion that can reduce the effectiveness of learning. Furthermore, older subjects and quantitative methods will be used in this research. The novelty of this research lies in its integration to enhance vocabulary acquisition in a meaningful and engaging way. This approach not only caters to various learning styles but also leverages interactive preferences. Moreover, this research uniquely investigates the dual role of storytelling-not only as a method to enhance vocabulary but also as a means to foster emotional and cognitive engagement, thereby deepening language comprehension and retention. Through storytelling, students benefit from this process in the development of their academic skills, such as research, and its presentation in an interactive manner. This strategy can be utilized to convey English vocabulary material

Moreover, storytelling is a form of knowledge management that conveys information meaningfully (Lucarevschi, 2016; Nazir Atta-Alla, 2012). According to Hofman-Bergholm (2022), storytelling resonates with students who must understand experiences through cultural views. It enhances interpersonal connections and helps them gain new knowledge from shared experiences. Narratives naturally connect ideas and events, helping learners grasp the flow and purpose of the lesson. Storytelling involves narrating coherent, event-based stories to an audience without relying on written text (Lamante, 2020).

Aligning with the current trend of using innovative teaching tools, researchers have adopted storytelling to implement such innovations (Bhakti & Marwanto, 2018; Mandarani & Megawati, 2024). As a tool, it proves effective for vocabulary instruction. Tools like storytelling encourage collaboration, providing students a dynamic and meaningful learning experience (Lumbangaol et al., 2024). It aligns with the growing need for interactive and creative teaching methods, especially for Gen-A, for whom English functions as a communication medium and primary instruction language (Fitriany et al., 2022).

Storytelling thus serves as a collaborative and effective method for teaching vocabulary. It nurtures

academic skills such as research and interactive presentation, offering a holistic learning experience. Beyond vocabulary acquisition, this study evaluates storytelling's broader impact as a creative teaching strategy that enhances learning outcomes and student performance (Huanca, 2022). Using quantitative methods, the main objective is to assess how storytelling contributes to vocabulary mastery. It addresses the following question: To what extent does the use of storytelling improve the vocabulary mastery of the 7th-grade students at SMP Muhammadiyah 5 Tulangan?

### **METHOD**

This study employed a quantitative experimental design to examine the effectiveness of storytelling in enhancing students' English vocabulary acquisition. The researchers used a pre-test and post-test design to measure the impact of the treatment. By applying statistical analysis, the study aimed to establish a cause-and-effect relationship between storytelling method and students' vocabulary mastery. The quantitative approach allowed the researchers to analyze patterns, relationships, and trends in the data, providing a structured and objective basis for drawing conclusions and making recommendations (Rustamana et al., 2024).

The researchers selected participants from SMP Muhammadiyah 5 Tulangan, with a sample of 19 7th-grade students (fourteen males and five females). This selection focused on students with similar English proficiency levels to ensure consistency in the treatment and analysis. The study aimed to assess how storytelling influences vocabulary development in early adolescent learners by targeting this group.

The data collection process followed a structured sequence. The researchers began by administering a pre-test to measure students' baseline vocabulary knowledge related to the topic "parts of the school." During the treatment phase, the researchers played a short video featuring a story about a new student, exploring their school environment. The story incorporated simple and repetitive vocabulary related to school facilities.

After playing the video, the researchers engaged them in various activities: Identifying vocabulary from the story, reading words aloud, rewriting vocabulary in their notebooks, and answering content-based questions. A guided Q&A session further supported comprehension of the context. At the end of the session, they completed a post-test to evaluate vocabulary gains after the storytelling intervention.

This process ensured that the treatment integrated visual, auditory, and kinesthetic learning styles, creating a dynamic and meaningful learning experience. The researchers developed pre-test and post-test instruments aligned with the learning objectives and vocabulary content to measure vocabulary mastery.

To ensure validity, the researchers conducted content validation by consulting two expert English lecturers—one serving as the research supervisor and another specializing in vocabulary instruction. These experts reviewed the test items for alignment with basic competencies, relevance to storytelling content, and appropriate difficulty levels. This validation ensured that the instruments accurately measured the intended vocabulary outcomes within the context of the storytelling method.

The researchers first conducted normality and hypothesis tests using SPSS 22. The normality test using the Kolmogorov-Smirnov and Shapiro-Wilk tests to assess the distribution of the pre-test and post-test scores (Pallant, 2020). The researchers also applied the Wilcoxon Signed-Rank Test as a non-parametric alternative suitable for paired samples (Angelini, 2019; Woodrow, 2014). This test measured the statistical significance of the difference between pre-test and post-test scores. The results provided empirical evidence regarding the effectiveness of storytelling in improving students' vocabulary proficiency.

To ensure the validity of the test instruments (both the pre-test and post-test), the researchers conducted content validity by involving expert lecturers in the profession of English teaching. This validation process is carried out by consulting the test items with the supervising lecturer and another lecturer who has expertise in vocabulary material development. The aim is to ensure that the questions correlate with the basic competencies to be measured and relevant to the context of vocabulary learning through the storytelling method. This validation includes the alignment of the material content with the learning objectives, the difficulty level of the questions, and the relevance of the questions to the story content used during the treatment. Therefore, the pre-test and post-test have a strong academic foundation to be used as instruments for measuring students' vocabulary proficiency.

The implementation of storytelling in the treatment session is carried out in a structured manner

and integrated with the learning material. The researchers began the session by playing a short video containing the story of a new student exploring their new school environment. In the story, the main character introduces various rooms in the school, such as the library, classrooms, laboratory, and teachers' room, using simple and repetitive language. Before the storytelling session begins, the students first take a pre-test related to the material "parts of the school." After the video is played, the researcher guides the students to mention the names of the rooms that appear, read together, rewrite in their notebooks, and answer questions related to the content of the story. The researchers also facilitated a Q&A session to strenghten the students' understanding of the context of vocabulary usage. At the end of the treatment session, students took a post-test to measure their vocabulary development. With this approach, storytelling not only serves as a medium for providing material but also as a learning tool that directly engages students' visual, auditory, and kinesthetic aspects, thereby creating a meaningful and enjoyable learning environment.

The population of this study is the students of SMP Muhammadiyah 5 Tulangan, while the sample consists of 7th-grade students. Data were collected and analyzed to assess the impact of using storytelling on the improvement of students' vocabulary. The main objective of experimental research is to establish a cause-and-effect relationship between variables. Experimental design is one type of explanatory research. Similar to survey research, experimental research focuses on the methods used to collect data.

In analyzing the data, the researchers used a quantitative approach with the help of SPSS version 22 application. The first step taken was the normality test of the data to determine whether the pre-test and post-test data are normally distributed. The normality test was conducted using the Kolmogorov-Smirnov and Shapiro-Wilk tests. The test results showed that the data were not normally distributed, so the researchers used the non-parametric Wilcoxon Signed-Rank Test. This test was used to determine whether there was a significant difference between the pre-test and post-test results after being treated with the storytelling method. The results of this data

analysis serve as the basis for drawing conclusions about the effectiveness of storytelling in improving students' vocabulary mastery.

### RESULTS AND DISCUSSION

This section presents the results of the normality and hypothesis tests used to analyze students' vocabulary acquisition before and after the storytelling intervention.

# 1. The Impact of Storytelling on Vocabulary Acquisition

research conducted **SMP** the Muhammadiyah 5 Tulangan, a normality test was performed to assess whether the scores obtained from the use of storytelling follow a typical distribution pattern. This step is important to ensure the validity and reliability of the data analysis process. By ensuring that the test scores show a normal distribution, researchers can determine the next steps in analyzing the impact of media storytelling on students' vocabulary. The results of the normality test provide assurance that the data meet the necessary criteria for statistical analysis or not, which strengthens the credibility of the research findings. To ensure that the data to be analyzed has a normal distribution, a normality test was conducted. The results of the Kolmogorov-Smirnov and Shapiro-Wilk (as in Figure 1) indicated that the pre-test and post-test scores were not normally distributed.

## **Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	.241	19	.005	.858	19	.009
Post-Test	.311	19	.000	.776	19	.001

Figure 1. The normality test towards the pre-test and post-test scores

(Source: Authors)

Specifically, the Shapiro-Wilk (as in Figure 2) returned significance values of 0.009 for the pre-test and 0.001 for the post-test, below the 0.05 threshold.

Test	Statistic	df	Sig.
Pre-test	0.858	19	0.009
Post-test	0.776	19	0.001

Figure 2. The Shapiro-Wilk test result

(Source: Authors)

The post-test scores showed a statistical value of 0.776 with a significance value of 0.001. These p-values suggest a statistically significant deviation from normality (Ghasemi & Zahediasl, 2012). This outcome is not unexpected given the relatively small sample size (N=19), as normality tests such as Shapiro-Wilk are susceptible to slight deviations in small datasets (Razali & Wah, 2011).

Since some parametric tests require normally distributed data, violating this assumption requires a non-parametric Wilcoxon Signed-Rank Test as the appropriate test for further analysis to examine the effect of the storytelling intervention. This choice ensures statistical validity in non-normal datasets (Angelini, 2019; Pallant, 2020; Woodrow, 2014).

The Wilcoxon signed-rank test (as in Figure 3) showed 13 of 19 students have improved their vocabulary acquisition, while 6 had unchanged scores. The Z value of -3.215 and a significance level of 0.001 (<0.05), indicating a statistically significant difference. Thus, the null hypothesis ( $H_0$ ) was rejected, and the  $H_1$  was accepted.

Ranks					
		N	Mean Rank	Sum of Ranks	
Post-Test - Pre-Test	Negative Ranks	Oa	.00	.00	
	Positive Ranks	13 <sup>b</sup>	7.00	91.00	
	Ties	6°			
	Total	19			

Test Statistics <sup>a</sup>		
	Post-Test - Pre-	
	Test	
Z	-3.215b	
Asymp. Sig. (2-tailed)	.001	

Description	Value
Sample Size (N)	19 students
Positive Ranks (number of students)	13 students
Mean Rank (average ranks)	7.00
Sum of Ranks (number of ranks)	91.00
Negative Ranks	0 student
Ties (same pre-test & post-test scores)	6 students
Z score	-3.215
Asymp. Sig. (2-tailed)	0.001

Figure 3. The Wilcoxon-Signed Rank test result

The number of samples analyzed was 19 students. From the analysis results, there were 13 students who showed an increase in scores after being given the storytelling treatment, with a mean rank of 7.00 and a total rank sum of 91.00. Furthermore, there were none of the participants who experienced a

decrease in scores (negative ranks = 0 students), while 6 students had the same scores between the pre-test and post-test (ties = 6 students). The obtained Z value is -3.215, with a significance value (Asymp. Sig. 2-tailed) of 0.001, which is less than 0.05. therefore it can be concluded that H0 is rejected and H1 is accepted, meaning there is a significant difference between the pre-test and post-test scores. These results indicate that the use of the storytelling method is effective in improving the English vocabulary mastery of seventh-grade students at SMP Muhammadiyah 5 Tulangan.

After completing the necessary analysis tests, such as the normality test to ensure the data meets statistical standards, hypothesis testing is conducted to assess how the use of storytelling media affects the vocabulary of students at SMP Muhammadiyah 5 Tulangan. If there is a significant difference between the average pretest and posttest scores, it is assessed using a paired sample t-test. Based on the hypothesis test results, the alternative hypothesis (H1) is accepted and the null hypothesis (H0) is rejected with a significant value (2-tailed) of 0.001, which is below the threshold of 0.05. The comparison of scores before and after the intervention shows that the use of storytelling significantly improves students' vocabulary. At SMP Muhammadiyah 5 Tulangan, the hypothesis test results provide strong evidence of the value of using storytelling in English language teaching.

The result of this research have practical implications for English teachers, namely that storytelling can be used as an alternative strategy to teach vocabulary in a fun and meaningful way. Teachers can develop stories that align with the learning material so that students can more easily understand new vocabulary. For students, learning through storytelling makes them more motivated, active, and quicker to remember vocabulary. This research also provides insights for schools to encourage teachers to use creative methods such as storytelling in English language learning. These outcomes confirm that storytelling significantly improved the vocabulary mastery of the 7<sup>th</sup>-grade students. It addresses the study's objective and

supports the effectiveness of storytelling as a vocabulary learning strategy.

Storytelling is effective because it provides context for vocabulary usage within a story, allowing students to understand the meaning of words directly in sentences. Additionally, storytelling introduces elements of emotion and imagination that enhance students' attention and motivation to learn. In this study, students appeared enthusiastic about participating in storytelling-based learning because the stories used were relevant to their lives, specifically about new students getting to know the school environment.

The findings align with the prior studies highlighting the effectiveness of storytelling in enhancing vocabulary acquisition. Baiomy (2024) emphasizes how storytelling fosters emotionally rich learning environments, leading to better vocabulary retention. Similarly, Kalantari and Hashemian (2015) argued that storytelling embeds new vocabulary in meaningful and memorable contexts, which supports deeper comprehension. Collectively, storytellingbased instruction not only gains vocabulary more effectively but also supports interactive and studentcentered learning (Nasikhah et al., 2019; Noviya & Anugerahwati, 2021; Otoluwa et al., 2022; Rahayu & Ummayah, 2023). It further validates this study's positive outcomes and supports storytelling as an effective pedagogical strategy for vocabulary development.

This research has several limitations, including a small sample size (19 students) and being conducted in only one school, so the results cannot yet be generalized to a larger population. In addition, the pre-experimental research design without a control group limits the researchers in ensuring that the improvement in students' vocabulary is solely due to the storytelling treatment.

### CONCLUSION

Storytelling-based instruction significantly improved the vocabulary mastery of seventh-grade students at SMP Muhammadiyah 5 Tulangan. The Wilcoxon Signed-Rank Test revealed a p-value of 0.001,

indicating a statistically significant difference between the pre-test and post-test scores. The findings confirm the positive impact of storytelling in supporting vocabulary acquisition and justify the rejection of the hypothesis. Beyond statistical evidence, storytelling is a meaningful and engaging instructional method. It contextualizes vocabulary learning, increases student motivation, and encourages active classroom participation. Teachers are encouraged to design storytelling activities relevant to students' reallife experiences and curriculum goals. Researchers recommend future studies to explore this method with larger samples, across disciplines, and comparative designs involving control groups to strengthen generalizability and instructional implications.

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### **REFERENCES**

- Al Zoubi, K. F. (2021). The Effect of Storytelling in Developing Vocabulary Acquisition. *Electronic Interdisciplinary Miscellaneous Journal*, 5, 1–14.
- Angelini, C. (2019). Hypothesis Testing. In *Encyclopedia of Bioinformatics and Computational Biology* (Vol. 1, pp. 691–697). Elsevier. https://doi.org/10.1016/B978-0-12-809633-8.20356-7
- Baiomy, W. S. E. (2024). Enhancing EFL Vocabulary Learning among Primary School Pupils via a Storytelling Strategy. *Journal of Faculty of Education*, 2(139), 3–24.
- Bhakti, S. O., & Marwanto, M. M. (2018). Vocabulary Mastery by Using Storytelling. *Script Journal: Journal of Linguistics and English Teaching*, 3(1), 79–91. https://doi.org/10.24903/sj.v3i1.146
- Ellis, G., & Brewster, J. (2014). *Tell it Again! The Storytelling Handbook for Primary English Language Teachers*. www.teachingenglish.org.uk
- Fitriany, F., Agustina, T., & Nur, F. (2022).

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- Storytelling. *Joong-Ki: Jurnal Pengabdian Masyarakat*, *I*(1), 82–87. https://doi.org/10.56799/joongki.v1i1.125
- Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489. https://doi.org/10.5812/ijem.3505
- Hofman-Bergholm, M. (2022). Storytelling as an educational tool in sustainable education. *Sustainability*, 14(5), 2946. https://doi.org/10.3390/su14052946
- Huanca, K. A. C. (2022). Storytelling as a Teaching Tool [Thesis]. Universidad Nacional De Educación.
- Kalantari, F., & Hashemian, M. (2015). A Storytelling Approach to Teaching English to Young EFL Iranian Learners. *English Language Teaching*, 9(1), 221–234. https://doi.org/10.5539/elt.v9n1p221
- Lamante, F. (2020). Improving the students' vocabulary mastery by using storytelling at the eleventh grade of language class in MAN Model 1 Manado [Undergraduate Thesis]. IAIN Manado.
- Lucarevschi, C. R. (2016). The role of storytelling in language learning: A literature review.
- Lumbangaol, R. R., Zaharani, H., & Anggraini, R. (2024). Using storytelling to improve students' vocabulary mastery at SMP Yabes School Medan. *Jurnal Multidisiplin Inovatif*, 8(4), 2246–6110.
- Mandarani, V., & Megawati, F. (2024). Transforming literary texts: A multiliteracies approach to engaging digital narratives. *English Review: Journal of English Education*, *12*(2), 419–426. https://doi.org/10.25134/erjee.v12i2.9530
- Nasikhah, R., M Basir, U. P., & Fajarina, M. (2019). Improving Students' Vocabulary Mastery Through Story Telling Strategy and Hand Puppet

- Media. *Intensive Journal*, 2(2), 106–112. https://doi.org/10.31602/intensive.v2i2.2461
- Nazir Atta-Alla, M. (2012). Integrating Language Skills through Storytelling. *English Language Teaching*, 5(12). https://doi.org/10.5539/elt.v5n12p1
- Noviya, H., & Anugerahwati, M. (2021). Improving vocabulary mastery of elementary school students by using storytelling strategy. *Educatio: Journal of Education*, 5(3), 193–205. https://doi.org/10.1017/cbo9780511733109
- Otoluwa, M. H., Rasid Talib, R., Tanaiyo, R., & Usman, H. (2022). Enhancing Children's Vocabulary Mastery Through Storytelling. JPUD - Jurnal Pendidikan Usia Dini, 16(2), 249–260. https://doi.org/10.21009/JPUD.162.05
- Pallant, J. (2020). SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS. Routledge. https://doi.org/10.4324/9781003117452
- Puntadewi, E. D., & Engliana, E. (2018). The role of vocabulary mastery and learning interest in speaking proficiency of Indonesian EFL learners. *Inference: Journal of English Language Teaching*, 1(3). https://doi.org/10.30998/inference.v1i3.5617
- Rahayu, R., & Ummayah, K. (2023). The using of storytelling in teaching vocabulary to improve English literacy of the fifth graders at SDIT Samawi Yogyakarta. *Khazanah Pendidikan*, 17(1), 390–401. https://doi.org/10.30595/jkp.v17i1.17230
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21–33.
- Rifiyanti, H., & Hidayat, S. (2024). Exploring the Significance of Storytelling and Retelling Activities in English Language Learning. *Tamaddun*, 23(1), 135–148. https://doi.org/10.33096/tamaddun.v23i1.647

- Rustamana, A., Wahyuningsih, P., Azka, M. F., & Wahyu, P. (2024). Penelitian metode kuantitatif. *Sindoro Cendikia Pendidikan*, *5*(6), 1–10. https://doi.org/10.9644/sindoro.v4i5.3317
- Woodrow, L. (2014). Writing about Non-parametric Tests. In *Writing about Quantitative Research in*
- Applied Linguistics (pp. 135–145). Palgrave Macmillan UK. https://doi.org/10.1057/9780230369955\_12