Learning Style Influence on Senior High School Students' Reading Ability

Kholifatul Munadhiroh¹, Sudar², Juita Triana³ {fatulatul07@gmail.com¹, sudarbintang@umpwr.ac.id², juitatriana8@gmail.com³}

English Education Program, Universitas Muhammadiyah Purworejo, Indonesia

DOI: 10.37729/scripta.v12i1.6330

Abstract. This study aims to determine the effect of students' learning styles on their reading ability, especially in class XI of SMA Negeri 8 Purworejo, in the 2024/2025 academic year. The approach used is quantitative with ex post facto and correlational designs. The sample of this study was 40 students selected using purposive sampling techniques. Data collection instruments were in the form of learning-style questionnaires and objective reading tests. The results of the analysis using Pearson Product-Moment showed a significant relationship between visual, auditory, and kinesthetic learning styles and students' reading ability, with a significance value of 0.000 <0.05. The calculated r values were 0.592 for visual, 0.607 for auditory, and 0.657 for kinesthetic. Learning styles contributed 57.7% to students' reading ability. This finding confirms that adjusting learning methods to students' learning styles has a positive effect on improving reading ability. This study is expected to be a reference for teachers in designing adaptive and student-centered learning strategies.

Keywords: Learning style, Reading ability, Visual, Auditory, Kinesthetic

1. INTRODUCTION

Learning is a process that allows students to manage and understand information effectively. External factors that influence learning are the environment, while internal factors involve student characteristics such as intelligence, motivation, attitude, and learning style [1]. These characteristics will determine how students respond to the material and strategies applied by the teacher. Students use different learning styles to help them succeed in language learning [2]. In the context of language learning, learning style is an important factor that influences student learning outcomes because each individual has preferences in absorbing information. Different learning styles show good performance in different aspects of language learning [3]. In addition, students can understand learning materials when studying in groups, but other students prefer to study independently [4]. This shows that students' independent preferences have a greater influence on the learning process. In the context of reading skills, appropriate learning styles can help students understand reading texts more deeply and efficiently, thus contributing to improving their reading skills at the high school level [5]. Adjusting language teaching methods to students' preferred learning styles can improve their understanding, motivation, and retention [6]. The suitability between students' learning styles and the learning methods used in the classroom can affect the effectiveness of learning in improving reading skills.

Learning style refers to an individual's preference in receiving, processing, and understanding information during the learning process. Learning style is how students connect concentration and how to process information received from their learning environment [7]. The concept of learning style is not only based on individual habits but can also develop along with certain experiences and contexts, such as environmental interactions. Learning style is a source of knowledge that reflects cognitive, affective, and physiological personality traits [8]. When students learn differently, and teachers use the same method for each student during the learning process, it will be a problem, and learning will not be effective [9]. Each student has certain characteristics and ways of processing information, so teachers need to adjust their teaching methods [10]. Teachers need to understand each student's learning style preferences. Awareness of students' preferred learning styles can help teachers implement effective teaching strategies that encourage student engagement and learning [11].

Students' learning styles can be divided into three main categories according to the VAK model: visual, auditory, and kinesthetic [12]. Each category reflects an individual's unique preferences in receiving and

processing information. Visual learners understand information better through representations such as pictures, diagrams, and graphs. They rely on sight to understand concepts and often use visual notes or mind maps as learning aids [13]. In contrast, auditory learners are more responsive to information delivered verbally. They find it easier to understand the material through listening to explanations, discussions, or audio recordings [14]. Meanwhile, kinesthetic learners gain understanding through direct experience and physical activity. They learn by doing, touching, and moving, which helps them internalize information more effectively [15]. Understanding these three styles makes learning more relevant and tailored to students' needs. In addition, students' learning style preferences have a significant influence on their reading ability [16].

Reading ability is one of the basic skills that is very important in the learning process. This activity not only involves recognizing letters and words but is also a cognitive process in forming new knowledge through the negotiation of meaning [17]. Reading is not a passive activity, but involves processing information in depth which is very important for the academic development of students [18]. Understanding orthography and exploring the meaning of symbols and written words are also an important part of this ability [19]. Reading plays a critical role in education as it enables students to acquire new knowledge, which supports their academic success [20]. All educational levels, including high school, require reading skills to help students master English as a foreign language [21]. Students need to master reading ability because it forms the essential foundation required for successful learning, especially when studying English in high school [22].

The reading ability of students at the high school level is still a challenge in the learning process, especially in the ability to read English as a whole. Many students are not yet able to read well, both in terms of recognizing text structure, understanding words, and drawing meaning from the reading. This difficulty is seen in the ability to read narrative texts, where they often experience obstacles in making inferences, determining the main idea, and mastering the meaning of the words used [23]. Another challenge arises when students have to understand complex sentences and find information that is not directly written, which is a common obstacle for novice readers [24]. Most students are not yet able to recognize the main idea or understand the hidden message in the reading, so important information is often not understood properly [25]. Similar things are found in students who have difficulty interpreting the meaning of words and drawing conclusions from the text [26]. In addition, low reading habits and the inability to choose the right reading strategy also make it difficult for their reading skills to develop [27]. In such situations, learning styles become an important factor influencing how students develop reading skills. Students have a different way of absorbing information, which indirectly affects how well they read. When students' learning styles do not match the teaching methods, learning to read becomes less effective. Therefore, recognizing students' learning styles is essential to help them develop better reading skills.

Research on reading has been published by several scholars. They pertain to self-motivation, efficacy, and anxiety. The student's motivation will enhance their interest and facilitate comprehension [28]-[30], serving as a catalyst for achieving greater scores [31]-[33]. Secondary school students require more media than traditional classes to alleviate boredom [34], [35]. At university, students favor engaging in group learning over independent study[36]-[38]. They tend to choose for asynchronous learning when choosing to study independently [39]- [41].

The issue of students' reading ability being influenced by their learning styles has attracted considerable attention from researchers. An appropriate learning style is believed to help students develop effective reading strategies, improve focus, and enhance their comprehension of the text being read [42]. However, various findings present differing perspectives on how learning styles influence reading ability. Several studies state that learning style significantly influences reading skills, but several studies conclude that this influence is not significant in the context of learning [43]-[44]. This difference in findings shows a gap in research that needs to be followed up through a more contextual advanced study by considering the characteristics of students, especially at the middle school level. Therefore, this research is focused on thoroughly studying the influence of learning styles on the ability to read students in the context of English learning, focusing on class XI students at SMA N 8 Purworejo Academic Year 2023/2024. This study aims to determine the extent to which learning styles affect students' reading ability, with the expectation that the findings will contribute to the development of more adaptive and student-centered instructional strategies. This study is expected to clarify the influence of Students' learning styles on reading ability and provide practical contributions for teachers in designing English learning strategies. In addition, the results of this study are expected to increase students' awareness regarding the importance of identifying their learning styles to enhance academic achievement and serve as a reference for future research in the development of effective English language instruction.

2. METHOD

This study applies a quantitative approach with an ex post facto and correlational design to evaluate the extent to which students' learning styles influence reading ability. In a quantitative approach, data analysis is carried out through the application of statistical procedures, both descriptively and inferentially, to describe and identify the relationship between variables [45]. The use of an ex post facto design in this study is based on the condition of the independent variables that have formed naturally and are not manipulated by the researcher [46]. This condition is appropriate because students' visual, auditory, and kinesthetic learning styles are tendencies that emerge naturally without external intervention. Meanwhile, a correlational design was chosen so that researchers could explore the relationship between variables using numerical data processed through statistical analysis techniques.

The population in this study consisted of all grade XI students of SMA Negeri 8 Purworejo in the 2024/2025 academic year, totaling 250 students and divided into seven classes. To obtain samples relevant to the research objectives, the researcher applied a purposive sampling technique, which is a method of selecting samples intentionally based on certain criteria relevant to the research objectives [47]. This approach allows researchers to target respondents with the most potential to provide contextual data. The researcher determined two classes with a total of 40 students as participants who were considered to represent the diversity of learning styles that were the main variables of the study.

Data was collected using a questionnaire and an objective test. The questionnaire was designed to identify three types of student learning styles, namely visual, auditory, and kinesthetic. Each statement in the questionnaire was arranged using five alternative answers that allowed for quantitative measurement of attitudes. On the other hand, objective tests in the form of multiple choice were used to assess students' reading ability, covering literal, inferential, and critical thinking skills toward the contents of the text. The combination of these two instruments provides comprehensive data to examine the influence of students' learning style preferences on reading ability

In this study, the data analysis techniques used included descriptive analysis and inferential analysis. Descriptive analysis aims to provide an overview of the distribution of learning styles and students' reading ability levels, which are calculated through the average, median, mode, standard deviation, and variance values. Descriptive analysis is used to describe the distribution of learning styles and students' reading ability levels through the calculation of the average, median, mode, standard deviation, and variance values. Meanwhile, inferential analysis is used to test the effect of learning styles on students' reading ability. Testing is carried out through several stages of statistical tests, namely normality tests, linearity tests, Pearson correlation tests, and multiple linear regression analysis. The entire data processing process is carried out using SPSS Statistics software version 26 to ensure the accuracy and validity of the research results.

3. FINDINGS

This research was conducted at SMA Negeri 8 Purworejo in the 2024/2025 academic year. In this implementation, the researcher took two main stages: distributing questionnaires and conducting tests. After all data was collected, the analysis was done using Statistics software version 26. The results of the analysis are presented in the table below:

Table 1. Result of the Descriptive Test

Descriptive Statistics Minimum Maximum Mean Std. Deviation Y test reading ability 40 28 100 74,63 22,768 X1 Visual 40 25 17,20 2,812 X2 Audiovisual 22 40 15 18,82 2,049 X3 Kinestetik 40 15 20,65 2,966 Valid N (listwise) 40

Based on Table 1, the results of SPSS descriptive statistics calculations are obtained in the form of each variable's minimum, maximum, average, and standard deviation values. The calculation results show that the kinesthetic learning style has the highest average (20.65), followed by auditory (18.83) and visual (17.2). Meanwhile, Variable Y (reading ability) shows an average of 74.63 with a standard deviation of 22.768, which indicates that the level of variation in students' reading ability is quite high.

Table 2. Result of Test Normality

One-Sample Kolmogorov-Smirnov Test

		Y test reading ability	X1 Visual	X2 Audiovisual
N		40	40	40
Normal Parameters ^{a,b}	Mean	74,63	17,20	18,83
	Std. Deviation	22,768	2,812	2,049
Most Extreme Differences	Absolute	,133	,136	,131
	Positive	,133	,136	,131
	Negative	-,127	-,117	-,131
Test Statistic		,133	,136	,131
Asymp. Sig. (2-tailed)		,074°	,060°	,080°

One-Sample Kolmogorov-Smirnov Test

		X3 Kinestetik
N		40
Normal Parameters ^{a,b}	Mean	20,65
	Std. Deviation	2,966
Most Extreme Differences	Absolute	,112
	Positive	,112
	Negative	-,111
Test Statistic		,112
Asymp. Sig. (2-tailed)		,200 ^{c,d}

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Based on Table 2, the results of the Kolmogorov-Smirnov normality test showed that the significance value for each variable is 0.074 (visual), 0.060 (auditory), 0.080 (kinesthetic), and 0.200 (reading ability). All variables have significance values above 0.05, it can be concluded that the four variables meet the normality assumption. The data are normally distributed and can be further analyzed using parametric methods, such as correlation and regression tests.

Table 3. Result of Linearity Test **ANOVA Table**

		Sig.
Between Groups	(Combined)	,007
	Linearity	,000
	Deviation from Linearity	,339
Within Groups		
Total		
Between Groups	(Combined)	,001
	Linearity	,000
	Deviation from Linearity	,134
Within Groups		
Total		
Between Groups	(Combined)	,016
	Linearity	,000
	Deviation from Linearity	,949
Within Groups		
Total		
	Within Groups Total Between Groups Within Groups Total Between Groups	Linearity Deviation from Linearity Within Groups Total Between Groups (Combined) Linearity Deviation from Linearity Within Groups Total Between Groups (Combined) Linearity Deviation from Linearity Within Groups (Combined) Linearity Deviation from Linearity

Based on Table 3, the results of the deviation from linearity test obtained a significance value of 0.339 for the visual variable, 0.134 for the auditory variable, and 0.949 for the kinesthetic variable. These significance values are above the significance limit of 0.05, indicating that the three variables meet the linearity requirements. Thus, the three learning style variables (visual, auditory, and kinesthetic) have a linear relationship to reading ability.

Table 4. Result of Correlations Test

Correlations

	Y test reading ability		
X1 Visual	Pearson Correlation	,592**	
	Sig. (2-tailed)	,000,	
	N	40	
X2 Audiovisual	Pearson Correlation	,607**	
	Sig. (2-tailed)	,000,	
	N	40	
X3 Kinestetik	Pearson Correlation	,657**	
	Sig. (2-tailed)	,000	
	N	40	
Y test reading ability	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	40	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Based on Table 4, the results of the Pearson Product-Moment test show that there is a significant relationship between learning styles and reading ability. From the SPSS output results, it can be seen that the significant values are 0.000, 0.000, and $0.000 < \alpha = 0.05$, and the calculated r values = 0.592, 0.607, and 0.657> r table value = 0.3120. The three correlation values also show a strong relationship category.

Tablel 5. Result of R Square

Model Summary ^b					
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	,760a	,577	,542	15,405	

a. Predictors: (Constant), X3 Kinestetik, X1 Visual, X2 Audiovisual

b. Dependent Variable: Y test reading ability

Based on Table 5, the R Square value of the Y equation = 0.577. This shows that 57.7% of the Test Reading Ability (Y) is influenced by the Visual (X1), Audiovisual (X2), Kinesthetic (X3) variables, while the rest (100% - 57.7%) namely 42.3% of the Test Reading Ability (Y) is influenced by other factors outside this study.

Table 6. Result of F-Test Analysis

$\mathbf{ANOVA^a}$							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	11674,221	3	3891,407	16,398	,000b	
	Residual	8543,154	36	237,310			
	Total	20217,375	39				

Based on the table above, it is known that the F value = 16.40, and the Sig. value = 0.000. Thus the Sig. value = 0.000 < 0.05, so that Ho is rejected, Ha is accepted. The Visual (X1), Audiovisual (X2), and Kinesthetic (X3) variables, together, have a significant effect on the Reading Ability Test (Y).

4. DISCUSSION

The results of the study showed that there was a significant and strong relationship between students' learning style and their reading ability. Based on the result of Pearson correlation analysis, the three types of learning styles (visual, auditory, and kinesthetic) had a significance value of 0.000 < 0.05, with r values of 0.592, 0.607, and 0.657. This means that students who learn in a way that suits their learning style tend to have better reading ability levels. This finding is supported by a regression analysis, which shows that the contribution of the three learning styles to the variation in reading ability scores reaches 57.7%. This means that more than half of students' reading ability achievements can be explained by their learning style tendencies.

These results strengthen the initial hypothesis of the study that learning style is an important factor in reading learning. For example, students with a kinesthetic learning style tend to show better results, which can be attributed to their need to be directly involved in active and action-oriented learning activities. Likewise, students with auditory and visual learning styles show positive reading performance when the learning approach is adjusted to the way they receive information. This finding is in line with the multimodal learning theory, which suggests that a diversity of learning styles should be accommodated to achieve optimal learning outcomes [48].

However, although the contribution of learning styles is quite significant, data still show that 42.3% of the variation in reading ability is influenced by factors other than learning styles. This shows that learning styles alone are not enough to guarantee high reading ability. Factors such as learning motivation, reading strategies used, reading frequency, and learning environment also play a role in influencing student learning outcomes [49]. An effective reading-learning approach must consider various other supporting factors in an integrated manner.

This study makes a significant contribution to the context of English language education at the senior high school level in Indonesia. The results of this study emphasize the importance of implementing a differentiation approach in the reading-learning process. Teachers must identify students' dominant learning styles early on and adjust the appropriate methods, media, and learning activities. A limited number of

studies examine the influence of learning styles on reading ability in the realm of English language education. These findings not only fill the gap in the existing literature but also provide a basis for teachers to design adaptive and student-centered learning.

5. CONCLUSION

Based on the study's results, students' learning styles significantly influence their reading ability in class XI of SMA Negeri 8 Purworejo. The three learning styles studied have a strong relationship with students' reading ability, as evidenced by the significance value of 0.000 <0.05 and the calculated r values of 0.592, 0.607, and 0.657. Kinesthetic learning style strongly influences students' reading ability, with the highest correlation coefficient of 0.657. This finding confirms that learning activities based on direct experience and movement contribute more significantly to improving students' reading ability. In addition, the regression results show that students' overall learning styles contribute 57.7% to the variation in their reading ability, while other factors influence the rest.

As a result, learning methods that follow students' learning styles can improve reading ability. Teachers are expected to pay more attention to students' learning styles in designing effective learning. This study is also expected to be a reference for further research by considering other factors, such as learning motivation, the use of technology media in reading learning, or the role of the learning environment, to create strategies for developing reading ability in the future. Underway.

6. REFERENCES

- [1] A. Damayanti, "FAKTOR-FAKTOR YANG MEMPENGARUHI HASIL BELAJAR PESERTA DIDIK MATA PELAJARAN EKONOMI KELAS X SMA NEGERI 2 TULANG BAWANG TENGAH," vol. 1, no. 1, 2022.
- [2] A. Y. Wahyudin and A. Wahyuni, "Exploring Students' Learning Style and Proficiency at a University in Indonesia: A Quantitative Classroom Research," *TS*, vol. 20, no. 2, p. 77, Jul. 2022, doi: 10.33365/ts.v20i2.2150.
- [3] Q. Huang, "Reviewing Learning Styles and Learning Motivation in Second Language Acquisition," *Lecture Notes in Education Psychology and Public Media*, vol. 29, pp. 48–53, Dec. 2023, doi: 10.54254/2753-7048/29/20231394.
- [4] D. Aminatun and L. Oktaviani, "Memrise: Promoting Students' Autonomous Learning Skill through Language Learning Application," *Metathesis.J.Engl.Lang.Lit.Teach.*, vol. 3, no. 2, p. 214, Nov. 2019, doi: 10.31002/metathesis.v3i2.1982.
- [5] Qurinta Shinta, "The Influence of Students' Learning Styles on The Understanding of Reading Texts," *JOEL*, vol. 2, no. 11, pp. 1207–1216, Jun. 2023, doi: 10.53625/joel.v2i11.5973.
- [6] G. Bisenbaeva and R. Abdullayeva, "How Learning Styles Affect Learning Languages," *International Journal of Artificial Intelligence*, vol. 1, no. 2, pp. 857–863, 2025.
- [7] E. S. Harida, F. R. Siregar, and R. Rina, "The Correlation between Learning Style and Students' Achievement in Reading Comprehension At Grade Xi Sma N Tambangan," *EEJ*, vol. 5, no. 1, p. 126, Jun. 2017, doi: 10.24952/ee.v5i1.1175.
- [8] E. Abouzeid, S. Fouad, N. F. Wasfy, R. Alkhadragy, M. Hefny, and D. Kamal, "Influence of personality traits and learning styles on undergraduate medical students' academic achievement," *Advances in medical education and practice*, pp. 769–777, 2021, doi: 10.2147/amep.s314644.
- [9] R. Jamilah and R. Hajriah, "A Study of The Studentsâ€Tm Learning Style At The Second Grade Of Smp Pesantren Guppi Samata," *Journal of English Education*, vol. 5, no. 1, pp. 34–39, 2020, doi: 10.31327/jee.v5i1.1154.
- [10] S. Sapira, M. Yeni, and F. Tria Sauhana, "An Analysis Of Students' Learning Style in Learning English at Eighth Grade of Smp N 1 Tembilahan Hulu," *JSI*, vol. 3, no. 2, pp. 151–166, May 2022, doi: 10.32520/jsi.v3i2.2039.
- [11] S. Payaprom and Y. Payaprom, "Identifying learning styles of language learners: A useful step in moving towards the learner-centred approach," *Dil ve Dilbilimi Çalışmaları Dergisi*, vol. 16, no. 1, pp. 59–72, Mar. 2020, doi: 10.17263/jlls.712646.
- [12] M. Rujani, "Correlational study between learning style and reading comprehension at university level students," in *Proceedings of the First International Conference on Progressive Civil Society (ICONPROCS 2019)*, Yogyakarta, Indonesia: Atlantis Press, 2019. doi: 10.2991/iconprocs-19.2019.9.
- [13] F. Anwar, S. Neviyarni, and M. Mudjiran, "Analysis of the Influence of Visual, Auditory, and Kinesthetic Learning Styles on Academic Achievement of Middle School Students," *JURNAL*

- PARADIGMA: Journal of Sociology Research and Education, vol. 5, no. 2, pp. 611–616, 2024, doi: 10.53682/jpjsre.v5i2.10508.
- [14] S. Shahzadi, "Preferred Learning Styles and Strategies among Medical Students in Pakistan: A Cross-Sectional Study Using The Visual, Auditory, And Kinesthetic (VAK) Model," *International Journal of Contemporary Issues in Social Sciences (IJCISS)*, vol. 2, no. 4, 2023, [Online]. Available: https://ijciss.org/index.php/ijciss/article/view/1605
- [15] S. S. Matazu, "Effect of flipped classroom instruction and enhanced lecture method on academic performance in genetics among students with Visual-Auditory-Kinesthetic (VAK) learning styles in Gusau, Zamfara State, Nigeria," *Journal of Science, Technology and Mathematics Pedagogy*, vol. 1, no. 2, pp. 1–20, 2023.
- [16] Z. Yousefi Afshari and A. and Pourhossein Gilakjani, "Investigating the Impact of Learning Styles on Reading Comprehension Skills and Self-Efficacy Perceptions: Evidence from Iranian Intermediate EFL Learners," *International Journal of Research in English Education*, vol. 8, no. 4, 2023, [Online]. Available: http://ijreeonline.com/article-1-874-en.html
- [17] M. Yunus and M. F. Ubaidillah, "EFL teacher educators' experiences in teaching critical reading: evidence from Indonesia," *J. Eng. Foreign. Lang.*, vol. 11, no. 2, pp. 422–441, Sep. 2021, doi: 10.23971/jefl.v11i2.3133.
- [18] F. Untailawan, "Improving students' reading comprehension and critical thinking skills through the implementation of qar strategy at SMA PGRI dobo," *Soshum: Jurnal Sosial Dan Humaniora*, vol. 10, no. 1, pp. 93–103, 2020, doi: 10.31940/soshum.v10i1.1721.
- [19] S. Fatimah, "Enhancing Junior High School Students' Reading Comprehension through Quizizz-Based Gamified Assessment," *English Language and Literature in Education Journal*, vol. 3, no. 1, pp. 38–57, 2025, doi: 10.63011/tyn8x842.
- [20] G. Subroto *et al.*, "Coastal Students' Perspectives on Digital Reading Comprehension: A Rasch Model Analysis," Jan. 2022. doi: 10.4108/eai.3-11-2021.2314832.
- [21] I. G. M. A. Nugraha, L. P. Artini, and I. A. M. I. Utami, "Students' Effort for Independent Learning Through Voluntary Extensive Reading," *JoES*, vol. 2, no. 3, pp. 226–233, Oct. 2022, doi: 10.36663/joes.v2i3.379.
- [22] R. Suson *et al.*, "Differentiated Instruction for Basic Reading Comprehension in Philippine Settings," *ujer*, vol. 8, no. 9, pp. 3814–3824, Sep. 2020, doi: 10.13189/ujer.2020.080904.
- [23] H. Khildainy, "Analyzing Students' Difficulties in Reading Comprehension of Narrative Text at Senior High School (A Mixed-Method Study at the Tenth Grade Students of SMAN 6 Kota Tangerang and SMAN 25 Kabupaten Tangerang)," 2023.
- [24] I. A. Hakim and A. P. Tanuatmadja, "Dealing with Common Challenges in Improving Reading Comprehension Skills for Indonesian Secondary School Students," vol. 5, no. 2, doi: 10.34050/elsjish.v5i2.21042.
- [25] A. Aini, N. Fitri, and S. Aisyah, "An Analysis of Students' Difficulties in Reading Comprehension at Eleventh Grade of Senior High School 8 Jambi City," *jelt*, vol. 7, no. 1, p. 7, Sep. 2023, doi: 10.33087/jelt.v7i1.127.
- [26] D. P. Laia, A. N. Pasaribu, and L. W. Manurung, "Reading Comprehension Difficulties on Students' Perception in Narrative Text," *Journal of Language Education (JoLE)*, vol. 2, no. 2, pp. 253–261, 2024, doi: 10.69820/jole.v2i2.160.
- [27] R. P. Lestari, S. S. Fitriani, and N. Erdiana, "Reading comprehension difficulties encountered by senior high school EFL students," *Research in English and Education Journal*, vol. 2, no. 2, pp. 110–118, 2017.
- [28] N. A. Nurhidayah, T. Tusino, and E. S. Masykuri, "Students' Perception toward EFL College Teacher Pedagogical Competence in Teaching Writing," *scripta*, vol. 9, no. 2, pp. 209–216, Oct. 2022, doi: 10.37729/scripta.v9i2.1475.
- [29] B. Basuki and E. Sunjayanto Masykuri, "Keefektifan penggunaan teknik digital smart finger dalam pengajaran reported speech," *JPSE*, vol. 8, no. 1, Jun. 2022, doi: 10.37729/jpse.v8i1.2063.
- [30] E. S. Masykuri, "Operating Android by Tapping Google Map Apps to Learn Direction In Vocational School," *Universitas Muhamadiyah Purworejo*, vol. 1, no. 1, p. 112, 2013.
- [31] Hari Purnomo Asmoro Aji, S. Widodo, E. S. Masykuri, and I. I. Nugraheni, "Students' Problems in Building up English Vocabulary," *scripta*, vol. 10, no. 1, pp. 44–58, May 2023, doi: 10.37729/scripta.v10i1.2353.
- [32] N. M. Rodzi, J. A. Kumar, S. Osman, and E. S. Masykuri, "Exploring Lecturers' Acceptance of Learning Management Systems in Malaysian Higher Educational Institution," 2020. [Online]. Available: https://api.semanticscholar.org/CorpusID:215813181

- [33] N. Prihatini, S. Sudar, T. Tusino, and E. S. Masykuri, "The Impact of Using Blended Learning to Improve Reading Comprehension," *scripta*, vol. 10, no. 1, pp. 128–139, May 2023, doi: 10.37729/scripta.v10i1.2361.
- [34] E. S. Masykuri and R. Nurhadi, "Observing Illocution in E-Comic Strip The Adventure of Tintin and Its Implication in English Language Teaching during The Pandemic," *jibsp*, vol. 1, no. 1, pp. 29–43, May 2022.
- [35] E. S. Masykuri, "Three Characters Building by Using Comik Wayang," *JPSE*, vol. 2, no. 2, pp. 1–13, Mar. 2017.
- [36] I. G. Ayu P.P., I. Mammadova, and E. Sunjayanto Masykuri, "Cooperative Learning by Jigsaw to Improve Learning Outcomes for Eight-Grade-Students," *scripta*, vol. 8, no. 2, pp. 45–54, Dec. 2021, doi: 10.37729/scripta.v8i2.1599.
- [37] E. Masykuri, "Optimizing Video in Zoom Meetings to Improve EFL Students' Speaking Performance," *Premise: Journal of English Education*, vol. 12, p. 31, Feb. 2023, doi: 10.24127/pj.v12i1.4878.
- [38] E. S. Masykuri, E. K. Alekseevna, A. Y. Nikitina, O. A. Petrovna, and R. Y. Purwoko, "How synchronous learning changes the workload of teachers: Experiences learned from expanding countries," *JPSE*, vol. 10, no. 2, pp. 158–171, Dec. 2024, doi: 10.37729/jpse.v10i2.5782.
- [39] E. Sunjayanto Masykuri and E. Konstina Alekseevna, "An Analysis of Listening Comprehension in Asynchronous and Synchronous Learning," in *Современное Высшее Образование Вызовы Времени И Актуальные Решения*, Чебоксары: Чувашский госуниверситет им. И.Н. Ульянова, 2024, pp. 228–240.
- [40] E. Sunjayanto Masykuri, V. O. Vladimirovna, and M. I. Evgenevichc, "First-year-students' perceptions of asynchronous media platform (AMP) for learning English," *Engl. Lang. Teach. Educational. Journal*, vol. 6, no. 3, pp. 188–198, Jul. 2024, doi: 10.12928/eltej.v6i3.6661.
- [41] E. Sunjayanto Masykuri, K. Ekaterina Alekseevna, and I. Ike Nugraeni, "Designing Asynchronous Digital Media for Teaching Reading Comprehension by Implementing Task-Based Learning," *jet*, vol. 6, no. 1, pp. 109–125, Jan. 2025, doi: 10.51454/jet.v6i1.485.
- [42] Ririn Sabriadi, "Pengaruh Kebiasaan Membaca terhadap Kemampuan Menulis Siswa," *jkpu-nalanda*, vol. 3, no. 1, pp. 161–166, Jan. 2025, doi: 10.47861/jkpu-nalanda.v3i1.1526.
- [43] G. Subroto and V. Vialisah, "Learning Styles and Reading Comprehension Achievement: A Correlation Study," *kiprah*, vol. 10, no. 2, pp. 68–75, Apr. 2023, doi: 10.31629/kiprah.v10i2.4609.
- [44] A. E Legaspi, D. J. R Nazareno, I. C Guan, and Ma. S. F Igat, "Learning Styles and Reading Comprehension in Modular Distance Learning of Grade 12 Senior High School Students," *IJAMRS*, vol. 5, no. 1, pp. 317–326, Jan. 2025, doi: 10.62225/2583049X.2025.5.1.3656.
- [45] F. Shaikh and S. Jha, "Analysing data in quantitative research," *Nursing and Midwifery Research Methods and Appraisal for Evidence-Based Practice. 6th Edition. Sydney: Elsevier*, pp. 228–254, 2020.
- [46] D. Rohwer, "Designing Ex Post Facto and Experimental Studies," In *Inquiry in Music Education*, Routledge, 2022, pp. 230–252.
- [47] M. A. Memon, R. Thurasamy, H. Ting, and J.-H. Cheah, "Purposive Sampling: A Review and Guidelines for Quantitative Research," *JASEM*, vol. 9, no. 1, pp. 1–23, Dec. 2024, doi: 10.47263/JASEM.9(1)01.
- [48] C. Cohn *et al.*, "Multimodal Methods for Analyzing Learning and Training Environments: A Systematic Literature Review," Aug. 22, 2024, *arXiv*: arXiv:2408.14491. doi: 10.48550/arXiv.2408.14491.
- [49] F. Han, "The Relations Between Motivation, Strategy Use, Frequency, and Proficiency in Foreign Language Reading: An Investigation With University English Language Learners in China," *SAGE Open*, vol. 11, no. 2, p. 21582440211008423, 2021, doi: 10.1177/21582440211008423.