

Improving Early Reading Skills Through Letter-Matching Games

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Abstract

This study aimed to improve early reading skills and student activeness through the use of letter-matching games in Grade I of one public elementary school in Palembang City. The research employed a Classroom Action Research (CAR) design conducted in three cycles, each consisting of planning, action, observation, and reflection stages. The research subjects were 32 first-grade students. Data were collected through reading tests and observation sheets to measure students' early reading abilities and learning activeness. The results showed a significant improvement in both early reading skills and student activeness across the three cycles. In Cycle I, the average reading score was 66.6 with a mastery percentage of 34%, and student activeness reached 63.4%. In Cycle II, the average score increased to 90.71 with a mastery percentage of 87%, while student activeness rose to 94%. In Cycle III, the average score further improved to 92.12 with a mastery percentage of 90%, and student activeness reached 96%. These results exceeded the predetermined success indicators, which required at least 80% of students to achieve mastery and a minimum of 75% student activeness. The findings indicate that the use of letter-matching games is effective in enhancing early reading skills and increasing student activeness. Therefore, letter-matching games can be recommended as an engaging and effective instructional strategy for early reading instruction in elementary schools.

Keywords: early reading skills, letter-matching games, student activeness, classroom action research



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Introduction

Reading is a fundamental language skill that plays a crucial role in students' academic success, particularly at the elementary school level. According to Dalman (Sumbawati et al., 2022), reading is a cognitive process aimed at understanding and interpreting written symbols in order to obtain meaning from a text. Reading is not merely the ability to recognize letters or words, but also involves comprehension, interpretation, and the integration of prior knowledge with new information (Khathimah, 2023; Maharani et al., 2024). Early reading, also known as beginning reading, is the initial stage in the development of reading skills. This stage focuses on basic mechanical abilities, such as recognizing letters, associating symbols with sounds, and reading simple words (Ain & Ain, 2024). Early reading instruction is typically provided in lower elementary grades, especially grades one to three, and serves as the foundation for more advanced reading skills, including reading comprehension (Maulidiyah, 2022). If students do not master early reading skills at this stage, they may experience difficulties in later learning processes.

However, in practice, early reading instruction often faces various challenges. Observations in one public elementary school in Palembang City revealed that many first-grade students had low early

reading ability. Only a small number of students were able to read fluently, while the majority struggled to recognize letters and form words. In addition, the learning process tended to be teacher-centered, relying heavily on conventional methods such as the Structure–Analysis–Synthesis (SAS) method. As a result, student involvement was limited, and many students showed low interest and motivation during reading lessons. Young learners, particularly first-grade students, generally have a strong preference for play-based activities. Learning activities that do not accommodate this characteristic may lead to boredom and passive behavior. Therefore, teachers need to design instructional strategies that are engaging, interactive, and appropriate to students' developmental stages (Setiarini et al., 2024). One potential strategy is the use of educational games. Games can create a joyful learning atmosphere, increase student motivation, and encourage active participation in the learning process (Dewantari et al., 2024).

Letter-matching games are one type of educational game that can be used in early reading instruction. This game requires students to match letters to form words, helping them recognize letter shapes, associate letters with sounds, and practice reading simple words in an interactive way (Rahman & Maskun, 2023). Previous studies suggest that game-based learning can improve both learning outcomes and student engagement, particularly in early literacy development.

In terms of research novelty, this study offers a distinctive contribution by integrating letter-matching games into a structured Classroom Action Research framework that simultaneously measures improvements in early reading skills and student activeness across multiple cycles. While previous studies have examined early reading instruction or game-based learning separately, this research emphasizes the systematic use of letter-matching games as an iterative instructional intervention tailored to the developmental characteristics of first-grade students. Furthermore, the study provides empirical evidence from a public elementary school context in Palembang City, highlighting practical classroom-based solutions for addressing low early reading ability. By combining cognitive (reading achievement) and behavioral (learning activeness) outcomes, this study strengthens the argument that letter-matching games are not only effective for improving literacy skills but also for fostering active and engaging learning environments in early elementary education.

Based on these considerations, this study focuses on the implementation of letter-matching games as an instructional strategy to improve early reading skills and student activeness. The research aims to examine whether the use of letter-matching games can enhance early reading ability and increase student participation among first-grade students in one public elementary school in Palembang City.

Methods

The research method used in this study is Classroom Action Research (CAR). According to Suryanto (1997) as cited in Muslich (2016:9), Classroom Action Research is a form of reflective research that involves taking certain actions to improve and/or enhance classroom teaching practices in a professional manner. This research was conducted at a public elementary school in Palembang City, with 32 first-grade students as research subjects. The research was carried out through several cycles consisting of the following stages:

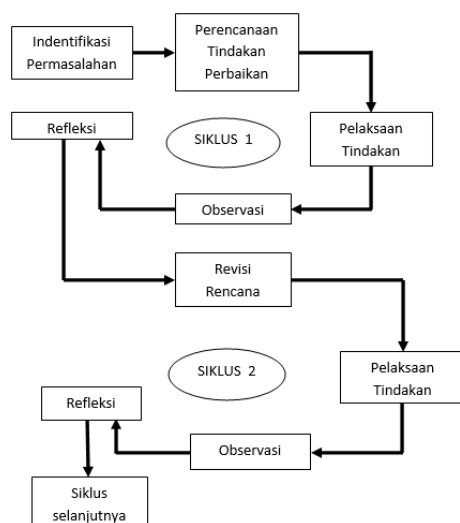


Figure 1. Research Stage

1. Planning Stage

Planning is the initial stage that must be conducted by the teacher before implementing instruction. Lesson plans are prepared for each cycle based on the identified problems. At this stage, the researcher prepared the syllabus, lesson plans, letter-card media, research instruments, and other supporting materials.

2. Action Stage

The action stage involves implementing the planned instructional activities to address the identified problems. In this study, the researcher conducted three action cycles.

3. Observation Stage

Observation was conducted to monitor, collect data, and document the teaching and learning process during the implementation of the action. The data analysed in the CAR report focused on the learning process, including student behaviours, teacher behaviour, teacher–student interactions, and other relevant aspects. Observation results served as the basis for reflection and therefore had to reflect actual classroom conditions.

4. Reflection Stage

Reflection was conducted to identify the strengths and weaknesses of the implemented actions, recognize obstacles encountered, and analyse the effects of the actions taken.

Data collection techniques used in this study included tests and observations. The success criteria of the study were as follows:

1. At least 80% of students achieve a minimum mastery score (KKM) of ≥ 70 .
2. Student activeness reaches at least 75%..

Results and Discussions

1. Results

a. Cycle I

Cycle I began with curriculum analysis and the preparation of teaching modules and learning tools. Instruction was conducted according to the prepared plan, consisting of introductory, core, and closing activities. In this cycle, students learned early reading through letter-matching games. The stages of the game included reading words, distributing letter cards, pointing to letter cards, and attaching letter cards.

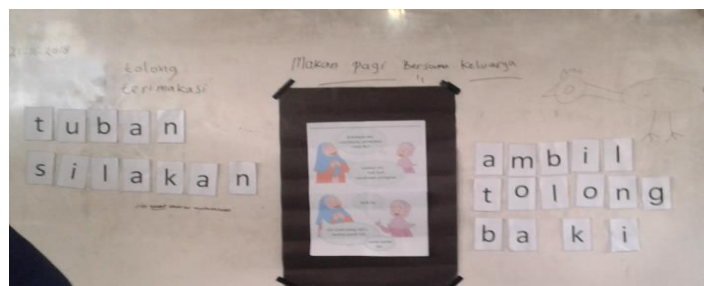


Figure 1. Letter Card Words

Observation results showed that out of 32 students, 4 were categorized as very active, 17 as active, 8 as moderately active, and 3 as less active. The overall level of student activeness in Cycle I reached 63.4%, which did not meet the predetermined criteria. Test results in Cycle I indicated a highest score of 100 and a lowest score of 34, with a class average of 66. Only 11 students achieved mastery, while 21 did not, resulting in a mastery percentage of 34%.

Table 1.
Initial Reading Test Results in Cycle I

Category	Amount
Completed	11
Incomplete	21
Average	66
Classical Completed	34%

The results of the students' test assessment in Cycle I did not meet the predetermined indicators of research success. Referring to the success criteria, the study required at least 80% of students to achieve learning mastery. However, the test results in Cycle I showed that this criterion had not yet been achieved. Therefore, follow-up actions were necessary, and the research was continued to Cycle II.

The reflection in Cycle I was conducted by the researcher through discussions and interviews with the classroom teacher, as well as observations during the teaching and learning process. Based on the observation and discussion results, it was evident that the learning activities using letter-matching games had not yet been implemented smoothly or effectively. The findings revealed that only a portion of the students were actively involved in the learning process. The teacher had not fully mastered the instructional steps of the letter-matching game, which caused students to appear confused and hesitant when asked to guess the words to be formed. Additionally, when students were asked one by one to come forward and attach the letter cards, several students needed encouragement, and some students were unwilling to participate despite repeated persuasion. Based on these findings, the researcher and the Grade I teacher agreed to implement follow-up actions as improvements in the subsequent cycle. The reflection results indicate that several problems emerged during the implementation of the action in Cycle I.

b. Cycle II.

Cycle II began by addressing learning issues from the previous cycle. Learning activities were carried out in accordance with the previous improvements. Learning activities began with an introduction, main points, and conclusion. In this activity, students learned to read beginnings using a letter-matching game. The stages of the letter-matching game were reading the word, distributing the letter cards, pointing to the letter cards, and attaching the letter cards.



Figure 3. Pointing to Letter Card Activity

Based on observations, it was found that out of 32 students, 28 were categorized as very active, 2 students were categorized as active, and 2 students were categorized as moderately active. Therefore, the level of student activity in Cycle II met the established criteria, with a classical percentage of 94%. Referring to the criteria table, the level of student activity in Cycle I falls into the Very Active category.

Based on the results of the student test assessment in cycle II, it is known that the test results of class I students in cycle II were the highest score reaching 100 and the lowest score was 56. The average class score was 90. There were 28 students who completed the test and 4 students who did not complete it with a completion percentage of 87%.

Table 2.
Initial Reading Test Results in Cycle II

Category	Amount
Completed	28
Incomplete	4
Average	90
Classical Completed	87%

The results of the student test assessment in Cycle II met the established research success indicators. Referring to the research success indicators, which stipulate that $\geq 80\%$ of students achieved learning completion. The results of the student test assessment at a public elementary school in Palembang City in Cycle II achieved the expected completion. However, to further confirm the results of Cycle II, further follow-up actions are needed, including a continuation to Cycle III.

Reflections on Cycle II were conducted by the researcher through discussions, interviews with teachers, and observations during the classroom learning process. Reflections on learning activities in Cycle II, based on observations and discussions between the researcher and the teacher, indicated that learning using the letter-matching game was smooth and effective. Findings from Cycle II revealed that almost all students were actively involved in the learning process. The teacher still had not fully memorized the steps for learning using the letter-matching game. Based on the aforementioned points, the researcher and the second-grade teacher agreed to take further action for improvement in the next cycle. Based on the reflections conducted by the teacher and researcher, it can be concluded that several problems arose during the implementation of Cycle II. Based on this, the teacher and researcher agreed to make improvements or revisions to the implementation plan for the next cycle.

c. Cycle III

Cycle III began by addressing learning issues from the previous cycle. Learning activities were carried out in accordance with the previous improvements. Learning activities began with an introduction, main points, and conclusion. In this activity, students learned to read beginnings

using a letter-matching game. The stages of the letter-matching game include reading the word, distributing the letter cards, showing the letter cards, and attaching the letter cards.



Figure 4. Attaching Letter Cards

Based on the results of the activity observations, it was found that out of 32 students, 28 were categorized as very active, 2 students were categorized as active, and 2 students were categorized as moderately active. Therefore, the level of student activity in Cycle III met the established criteria, with a classical percentage of 96%. Referring to the criteria table, the level of student activity in Cycle III falls into the Very Active category.

Based on the results of the student test assessment in cycle III, it is known that the test results of class I students in cycle III were the highest score reaching 100 and the lowest score was 56. The average class score was 92. 29 students completed the test and 3 students did not complete it with a completion percentage of 90%.

Table 3.
Initial Reading Test Results in Cycle III

Category	Amount
Completed	29
Incomplete	3
Average	92
Classical Completed	90%

The results of the student test assessments in Cycle III met the established research success indicators. Referring to the research success indicators, which stipulate that $\geq 80\%$ of students achieved learning completion. The results of the test assessments of students at a public elementary school in Palembang City in Cycle III of the research achieved the expected completion.

Reflections on Cycle III were conducted by the researcher through discussions, interviews with teachers, and observations during the classroom learning process. Reflections on learning activities in Cycle III, based on observations and discussions between the researcher and teachers, indicated that the learning process using the letter-matching game was smooth and effective. Findings from Cycle III revealed that almost all students were very active in the learning process, and the test assessments showed improvements compared to Cycle II. This research was not continued to the next cycle because the success indicators, namely 90% student completion and 96% student activeness in the learning process, had been achieved.

2. Discussions

Based on the observations of student activity in Tables 1, 2, and 3, it can be seen that student activity increased from Cycle I to Cycle III. This is evident in Cycle I, where the average student activeness score was 63.4, categorized as "active." In Cycle II, the average student activeness score was 94, categorized as "very active." In Cycle III, the average student activeness score was 96, categorized as "very active."

The observations in Cycle I indicate that some students were able to participate in the learning activities. Cycle II saw significant improvement compared to Cycle I. Cycle III also saw

improvement compared to Cycle II. Data analysis reveals that students are exhibiting positive or improving learning outcomes.

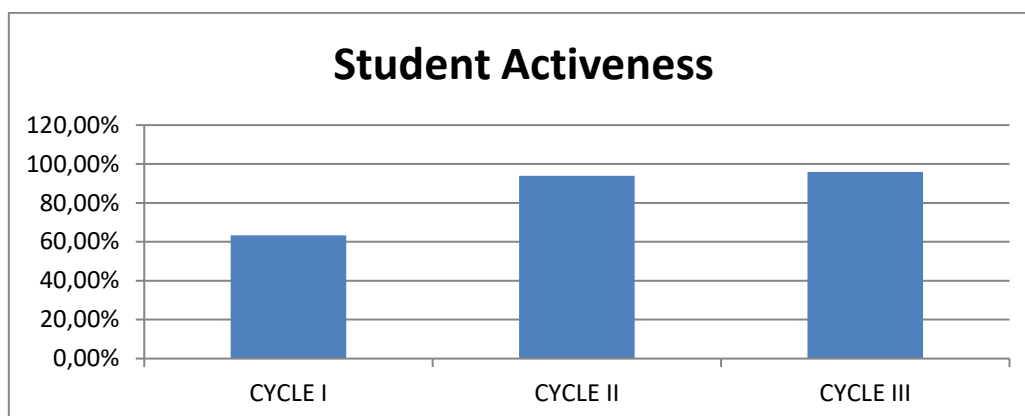


Figure 5. Student Activeness

According to Sholihah et al. (2023), activeness is a state in which students are active. Student activeness can be seen from their commitment to learning. Inactive students are demonstrated by several cases in class, such as a lack of enthusiasm for learning, laziness, a tendency to feel sleepy, a reluctance to participate in lessons, a tendency to ask for permission to leave, and so on. Therefore, teachers need to find ways to increase student activeness. Learning activeness is influenced by many factors, some of which originate from within the student, some related to skills, and others not, such as interest and motivation to learn (Rahmadani et al., 2023). Interest and motivation to learn are fostered through the efforts and situations created by the teacher (Maharani et al., 2023; Sobari et al., 2022).

According to Hikmah et al. (2022), successful learning requires a variety of activities, both physical and psychological. Physical activity involves students actively using their bodies, making things, playing, or working. Therefore, letter matching games are expected to encourage students to be active in learning activities.

Based on the research results, the initial reading skills of first-grade students at a public elementary school in Palembang City improved in each cycle. Based on the student evaluation results in Cycle I, the highest score for first-grade students in Cycle I was 100 and the lowest was 34. The average class score was 66.6, with a completion percentage of 34%. The test scores of students at a public elementary school in Palembang City in Cycle I did not achieve the expected learning completion, necessitating further follow-up or a continuation to Cycle II.

In Cycle II, the average student test score was 90.71, with a completion percentage of 87%. Based on the average score and completion percentage of student test assessments, the researcher will continue to Cycle III to further strengthen the scores from Cycle II. In Cycle III, the average class score increased to 92.12, with a completion rate of 90%. Based on the average score and completion rate of the student test assessment, Cycle III can be considered successful, as it achieved the established indicator of 80%. Based on the description above, it can be seen that students' reading ability improved from Cycle I to Cycle III.

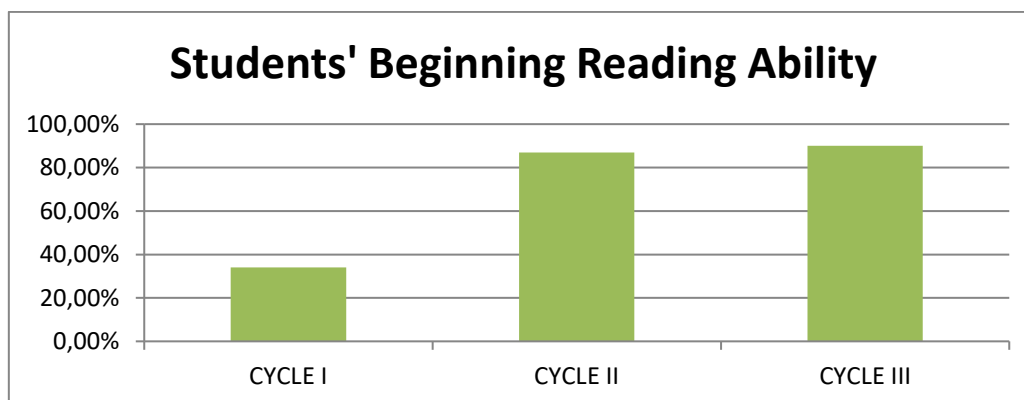


Figure 6. Students' Beginning Reading Ability

According to Dalman (Fahmiyah et al., 2025), the elements of reading ability can essentially be traced as stated above. First, because reading is an interaction with language that has been converted into print, the ability to recognize sound symbols is the primary determinant of reading success. Second, because the results of this interaction with print are also a determining factor in reading success. Third, because reading ability is related to oral reading ability, physical abilities, such as visual acuity and the ability to control lip movements, also influence reading success. Fourth, because reading is an active and ongoing process influenced by a person's interaction with their environment, reading success is also influenced by intelligence and reading experience.

According to Soleha et al. (2022), beginning reading is considered basic reading. This emphasizes physical activity. The ability to vocalize written language symbols and grasp the meaning behind those symbols is part of the activity. Meanwhile, according to Irawan et al. (2023), there are several factors in reading ability: physiological, intellectual, environmental, and psychological. Psychological factors include motivation, interest, social maturity, emotional maturity, and adjustment. Therefore, the use of letter-matching games is expected to foster understanding in students and maintain their interest, motivation, and active involvement in learning, thereby maximizing their learning outcomes.

In classroom action research using this letter matching game, there are several weaknesses and limitations in its use, including the number of student group members can be very large or very small because the number of group members must be adjusted to the number of letters in each word and the uncertain number of groups makes teachers sometimes confused about dividing students into groups.

Conclusion

This study investigated the effectiveness of letter-matching games in improving early reading skills and student activeness among first-grade students in one public elementary school in Palembang City. The findings of this Classroom Action Research demonstrate that the implementation of letter-matching games successfully addressed the research problem and achieved the predetermined success indicators. The results showed a consistent improvement in students' early reading skills across the three research cycles. The percentage of students achieving learning mastery increased from 34% in Cycle I to 87% in Cycle II and further to 90% in Cycle III, with corresponding increases in average reading scores. These findings indicate that letter-matching games effectively supported students in recognizing letters, associating sounds with symbols, and forming simple words, which are essential components of early reading skills.

In addition to improving reading ability, the use of letter-matching games also significantly enhanced student activeness during the learning process. Student participation increased from a moderately active level in Cycle I to a very active level in Cycles II and III. This improvement suggests that game-based learning creates an engaging and motivating learning environment that encourages

students to actively participate in reading activities. Based on these findings, it can be concluded that the use of letter-matching games is an effective instructional strategy for improving early reading skills and increasing student activeness in elementary school learning. Therefore, letter-matching games are recommended as an alternative learning approach for early reading instruction, particularly for first-grade students, as they provide an enjoyable, interactive, and meaningful learning experience.

References

- Ain, R. N., & Ain, S. Q. (2024). Kesulitan Membaca Permulaan Siswa Kelas 1 Sekolah Dasar. *Didaktika: Jurnal Kependidikan*, 13(1 Februari), 1029–1036. <https://doi.org/10.58230/27454312.547>
- Dewantari, W. D. A., Azizah, S. N., Lakalay, D., Isrofiana, Z., Rohmatul 'izza, T., & Oktaviani, R. N. (2024). Penggunaan Media Scrabble Pada Keterampilan Membaca Dan Menulis Permulaan Siswa Kelas 1 MI Tarbiyatul Ulum. *INVENTA: Jurnal Pendidikan Guru Sekolah Dasar*, 8(1), 31–44. <https://doi.org/10.36456/INVENTA.8.1.A8749>
- Fahmiyah, A. U., Kuswandi, D., & Wahyuni, S. (2025). Using Learning Media to Improve Beginning Reading Skills. *PAUDIA*, 14(2), 308–326. <https://doi.org/10.26877/PAUDIA.V14I2.1568>
- Hikmah, H., Qodir, A., & Wahdah, N. (2022). Aktivitas Belajar dan Motivasi Belajar: Apakah Efektif dalam Mengembangkan Hasil Belajar Pendidikan Agama Islam Peserta Didik. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 7(2), 340–358. [https://doi.org/10.25299/AL-THARIQAH.2022.VOL7\(2\).10555](https://doi.org/10.25299/AL-THARIQAH.2022.VOL7(2).10555)
- Irawan, D., Kharisma, F. N., & Nugroho, A. (2023). Analisis Faktor Penyebab Kesulitan Membaca Permulaan Peserta Didik Kelas II SD. *Social, Humanities, and Educational Studies (SHES): Conference Series*, 6(3). <https://doi.org/10.20961/SHES.V6I3.82309>
- Khathimah, H. (2023). Peran Metode Pembelajaran Interaktif Dalam Peningkatan Literasi Membaca di Kelas 2 MIN 13 Aceh Utara. *ABANNA: Journal Of Contemporary Islamic Education*, 1(2), 109–122. <https://doi.org/10.71036/AJCIE.V1I2.154>
- Maharani, S. D., Ilma, R., Putri, I., Syawaliyah, A. F., & Safitri, M. L. O. (2024). Interactive learning media: Literacy and numeracy Limas House Balaputera Dewa Museum in phase B. *Research and Development in Education (RaDEn)*, 4(1), 617–629. <https://doi.org/10.22219/RADEN.V4I1.32832>
- Maharani, S. D., Safitri, M. L. O., & Setiawan, F. A. (2023). Design of Interactive PowerPoint Media on CTL Model in Primary School. *Journal for Lesson and Learning Studies*, 6(2). <https://doi.org/10.23887/JLLS.V6I2.62053>
- Maulidiyah, E. C. (2022). Pengaruh Game Belajar Membaca Terhadap Kemampuan Membaca Permulaan Usia 5-6 Tahun. *Kumara Cendekia*, 10(4), 302–316. <https://doi.org/10.20961/KC.V10I4.62757>
- Rahmadani, S., Yandra Kusuma, Y., & Mufarizuddin. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Keaktifan Belajar Siswa Sekolah Dasar. *Jurnal Muassis Pendidikan Dasar*, 2(1), 45–53. <https://doi.org/10.55732/JMPD.V2I1.37>
- Rahman, A., & Maskun, J. (2023). Permainan Kartu Huruf Untuk Meningkatkan Kemampuan Mengenal Huruf Pada Peserta Didik RA Nur Zahra Tomohon. *Indonesian Journal of Early Childhood Education (IJECE)*, 3(2), 49–66. <https://doi.org/10.30984/IJECE.V3I2.832>
- Setiarini, N. P. D., Margunayasa, I. G., & Rati, N. W. (2024). Media Game Edukasi Membaca Permulaan Untuk Meningkatkan Motivasi Belajar Pada Siswa Kelas I Sekolah Dasar. *Journal of Education Action Research*, 8(3), 435–443. <https://doi.org/10.23887/JEAR.V8I3.78594>
- Sholihah, A., Warsiman, W., & Arista, H. D. (2023). Meningkatkan Keaktifan Siswa melalui Pembelajaran Interaktif Berbasis Blended Learning pada Materi Teks Artikel. *Jurnal Pendidikan Bahasa*, 12(1), 95–105. <https://doi.org/10.31571/BAHASA.V12I1.5057>
- Sobari, A., Bastian, O., & Noviyanti, S. (2022). Peran Guru dalam Meningkatkan Minat Belajar Siswa di Kelas III SD Negeri 182/I Hutan Lindung Muara Bulian. *AS-SABIQUN*, 4(2), 360–374. <https://doi.org/10.36088/ASSABIQUN.V4I2.1758>
- Soleha, R. S., Fadhilah, D., Enawar, & Sumiyani. (2022). Analisis Kesulitan Membaca Permulaan Pada

Siswa Kelas II Sekolah Dasar. *Berajah Journal*, 2(1), 58–62. <https://doi.org/10.47353/BJ.V2I1.50>
Sumbawati, Y., Tahir, M., & Sudirman, S. (2022). Analisis Kesulitan Membaca Permulaan Siswa Kelas 1 SDN 1 Penujak Tahun Ajaran 2021/2022. *Jurnal Ilmiah Profesi Pendidikan*, 7(3c), 1817–1822. <https://doi.org/10.29303/JIPP.V7I3C.846>

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