

The Effect of Synthetic Analytical Structural Methods (SAS) on Elementary School Students' Initial Reading Ability

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Abstract

This research is motivated by the low initial reading skills of grade I students of MIS Al-Khairi, especially in recognizing letters, reading simple syllables, words, and sentences. This study aims to determine the influence of the Structural Synthetic Analytic (SAS) method on the reading ability of grade I students. The research sample comprised 30 students, divided into an experimental class and a control class. Data were collected through oral tests consisting of a pretest and a posttest. Data analysis was carried out using normality tests, homogeneity tests, and *independent sample t-tests*. The results showed a significant difference between the experimental and control groups ($t = -5.619$; $p < 0.001$). More importantly, the SAS method has a substantial influence on students' initial reading ability, with a Cohen's d of 2.05, which falls in the *very large effect category*. The average posttest score of the experimental group ($M = 49.13$) was higher than that of the control group ($M = 40.33$). The SAS method helps students gradually understand the relationships among letters, syllables, words, and sentences, making reading instruction more effective. Thus, the SAS method can be used as an alternative learning strategy to improve the reading skills of elementary school students.

Keywords

Reading Beginnings, SAS Methods, Elementary School Students, Quasi Experiments.



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INTRODUCTION

The reading literacy skills of elementary school students in Indonesia is still a challenge that requires serious attention. Data Programme for International Student Assessment (PISA) 2022 shows that the reading literacy score of Indonesian students reached 359, lower than the average of OECD member countries which reached 476 (OECD, 2022). This finding is strengthened by the results of the 2023 Assessment which shows that there are still many elementary school students in the minimum competency category and below the minimum in reading literacy (Wahyu Nurhayati, Nurbaiti Astuti & Assessment, 2024). This condition shows that most students still have difficulty in understanding, evaluating, and interpreting the information contained in the text. Therefore, effective learning strategies are needed to improve reading skills since primary education.

According to the theory of initial reading, the reading process develops through the stages of letter recognition, syllable recognition, word formation, to understanding meaning (Olivia, 2023).

Each stage must be mastered sequentially so that students are able to read fluently and understand the content of the reading. Reading is a basic skill that is the foundation of students' success in following the learning process in various subjects (Aina & Devianty, 2025). At the elementary school level, especially in the early grades, initial reading skills include the skills of recognizing letters, reading syllables, reading words, and understanding simple sentences (Bellasonya & Zaini, 2024). Mastering these skills is very important because it is the basis for the development of literacy skills in the next stage. Students who have good reading skills tend to understand learning materials more easily than students who still have difficulty reading (Andina Halimsyah Rambe, 2025).

According to the theory of language development, the acquisition of language skills develops gradually through the interaction between language symbols and meanings that children understand (Hazimah et al., 2024). Meanwhile, cognitive theory views that the reading process involves complex mental activities, such as symbol recognition, information processing, memory storage, and understanding meaning (Nirvana Anas, n.d.). The reading process is not only limited to recognizing letter symbols, but also understanding the meaning of written language (Yusnaldi, 2018). According to the theory of early literacy, children need systematic, meaningful, and gradual learning in order to be able to fully understand the relationship between sound symbols and the meaning of language (Safran, Ayu Annela, 2023). The better the students' reading skills, the greater their chances of understanding the learning material (Fadila & Syam, 2025). Therefore, reading skills need to be developed from the beginning of elementary school or Madrasah Ibtidadiyah as a

foundation for the development of students' literacy skills in the next stage (Khairina & Nasution, 2024). Learning Indonesian in elementary school also plays an important role in building students' oral and written communication skills (Rahmayanti Fitria Purba & Aufa, 2024).

The problem of early reading ability was also found at MIS Al-Khairi based on the results of initial observations made on February 7, 2026. In class I-A, which amounted to 17 students, only five students were able to read fluently, seven students were still reading stammerically, and five students had difficulty recognizing letters. Similar conditions were found in classes I-B which amounted to 16 students, only five students were able to read fluently, seven students read stammerically, and four students were not able to recognize letters well. The findings show that students' initial reading ability is still relatively low and requires handling through more effective learning strategies.

A student's low reading ability can be caused by a number of reasons, including internal factors such as desire and motivation to learn, as well as external factors such as family support and the application of less diverse learning techniques (Rambe et al., 2023). Some students still have difficulty in reading the beginning, pronouncing the correct letter sounds (Rahma & Dafit, 2021), and syllable merging (Muthi, 2025). The lack of motivation for students to practice reading independently is also an obstacle, especially because they often consider reading as a boring activity (Kusumawati et al., 2025).

One of the methods that can be used to overcome this problem is the Structural Analytic Synthetic (SAS) method. The SAS method is a reading learning method that begins with the presentation of complete sentences, then is analyzed into words, syllables, and letters, and then synthesized back into a complete form of language (Purnamasari et al., 2025). Through these stages, students not only learn to recognize language symbols, but also understand the relationship between language forms and their meanings gradually (Masriana & Riris Nurkholidah Rambe, 2025).

Various previous studies have shown that the Synthetic Analytical Structural (SAS) method is effective in improving the initial reading ability of elementary school students. However, most of the studies were conducted in public elementary schools and focused on testing statistical significance without considering the magnitude of the effect effect of the treatment. In addition, research on the application of the SAS method in private ibtidaiyah madrasas is still relatively limited. Therefore, this study not only examines the significance of the influence of the SAS method on students' initial reading ability, but also analyzes the magnitude of the influence of using Cohen's

d to obtain a more comprehensive picture of effectiveness.

Based on these conditions, this study was conducted to analyze the influence of the Structural Synthetic Analytic (SAS) method on the initial reading ability of grade I students of MIS Al-Khairi. This research is expected to provide empirical evidence regarding the effectiveness of the SAS method in improving students' initial reading skills and become a reference for teachers in choosing reading learning strategies that are in accordance with the characteristics of students.

METHOD

This study uses a quantitative approach with a *quasi-experimental design*. The design used was a *non-equivalent control group design* involving an experimental group and a control group without a randomization process. This design was chosen because the researcher did not allow the full randomization of the subjects, but could still compare the effectiveness of the treatment through the administration of pretests and posttests in both groups.

This research was carried out at MIS Al-Khairi, located in Hamlet IV, Nagur Pane Village, Sipispis District, Serdang Bedagai Regency, North Sumatra for the 2025-2026 school year. The total population of the study was 33 students divided into two classes. Classes I-A with a total of 17 students, which were designated as experimental classes and classes I-B totaled 16 students as the control class in this study. Classes I-A were chosen as experimental classes because they have more diverse reading skills and require the application of more varied learning methods, while classes I-B are used as control classes because they use conventional learning that is usually applied by teachers. In addition, the two classes have a relatively different level of initial reading ability based on the results of the initial observation of the pretest data, so it is suitable for use as a comparison group in the research. However, based on the completeness of the pretest and posttest data, only 30 students met the analysis criteria, consisting of 15 students in the experimental class and 15 students in the control class. This study uses the purposive sampling technique, which is the selection of samples based on certain considerations.

The use of the Structural Synthetic Analytic (SAS) method is an independent variable (X), while the initial reading ability of grade I students is a variable (Y). An initial reading proficiency test that includes elements of letter recognition, syllables, words and simple sentences was used in this study. In addition, observations were carried out to observe students' activeness during the learning process, the ability to recognize letters, the ability to read syllables, the ability to read words

and the ability to read simple sentences.

Pretest and posttest are carried out to collect data. Once the data met the criteria for homogeneity and normality testing, descriptive statistical methods and independent t tests were used for the analysis. A significance level of 0.05 was used for hypothesis testing. The research hypothesis is H_0 which states that the Synthetic Analytical Structural method (SAS) has no effect on students' initial reading ability, and H_a which states that the Synthetic Analytical Structural method has an effect on students' initial reading ability.

FINDINGS AND DISCUSSION

Findings

a. Descriptive Statistical Test

Descriptive statistical analysis was used to provide an overview of the research data which included the number of respondents, lowest scores, highest scores, mean values, and standard deviations in each study group. Descriptive data aims to determine the initial and final conditions of students' abilities in the control group and experimental groups before further testing is carried out. The following is a table of the results of the descriptive test analysis.

Table 1. Descriptive Analysis Test Results

Groups	N	Minimum	Maximum	Red	Std. Deviation
Control Pretest	15	22	47	33.73	6.216
Posttest Control	15	34	50	40.33	4.562
Pretest Experiment	15	22	39	31.07	5.483
Posttest Experiment	15	42	55	49.13	3.998

The results of the descriptive analysis showed that the average posttest score of the experimental group was higher than that of the control group. The experimental group obtained an average score of 49.13, while the control group obtained an average score of 40.33. These findings indicate that learning using the Structural Synthetic Analytics (SAS) method provides better results than conventional learning. To find out the increase in the average score, you can see the following table.

Table 2. Improvement of Students' Initial Reading Ability

Groups	Red Pretest	Mean Posttest	Gain Score	Percentage Increase
Controls	33,73	40,33	6,60	19,57%
Experiments	31,07	49,13	18,06	58,13%

The results of the analysis showed that students' initial reading ability improved in both groups after the learning process. Although the control group experienced an increase, the increase was lower than that of the experimental group. This shows that regular learning still contributes to the development of reading skills, but its effectiveness is not as great as the Structural Synthetic Analytic (SAS) method. However, the improvement that occurred in the experimental group was higher than in the control group. The experimental group had an average increase of 18.06 points, while the control group only experienced an increase of 6.60 points. These findings indicate that the application of the Structural Synthetic Analytics (SAS) method contributes more to improving students' initial reading skills than conventional learning.

In addition to the increase in average scores, changes in reading ability are also seen in the minimum and maximum scores. In the experimental group, the minimum score increased from 22 to 42 and the maximum score increased from 39 to 55. This shows that the Synthetic Analytical Structural (SAS) method not only helps high-ability students, but also supports the development of students who previously had reading difficulties.

To clarify the difference in the improvement of initial reading ability between the experimental group and the control group, the average data of pretest and posttest scores were presented in the form of a bar chart. This bar chart provides a visual overview of changes in students' reading ability before and after treatment in each group.

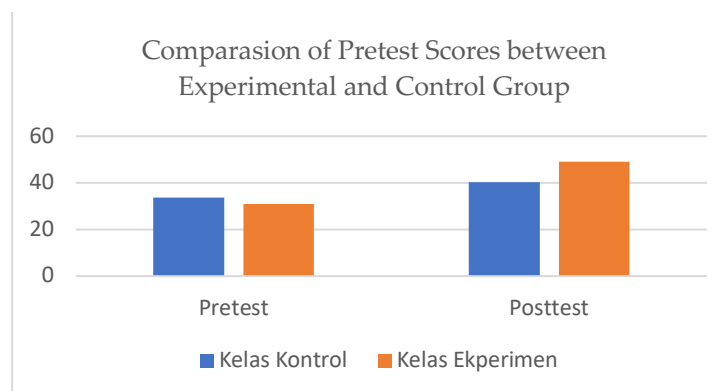


Figure 1. Comparison of the average pretest and posttest scores of the experimental and control groups

The increase in scores in the experimental group showed that students were increasingly able to recognize letters, combine syllables, read words, and understand simple sentences. The magnitude of the increase in scores indicates that the Structural Synthetic Analytic (SAS) method helps students build relationships between letter symbols and sounds more systematically so that the reading process becomes easier to understand.

Overall, the results show that the Synthetic Analytical Structural (SAS) method not only improves students' average initial reading ability, but also results in a larger, more even, and consistent improvement than conventional learning.

b. N-Gain Analysis

The results of the N-Gain analysis can be seen in the following table:

Table 3. N-Gain Analysis Results

Classes	N-Gain Value
Experiments	76%
Controls	44%

N-Gain analysis was carried out to determine the level of improvement in students' initial reading skills after participating in the learning process. The results of the analysis showed that the experimental group obtained an N-Gain value of 76%, while the control group obtained an N-Gain value of 44%.

Based on the N-Gain interpretation criteria, a score of 76% in the experimental group was in the high category, indicating that the Structural Synthetic Analysis (SAS) method was effective in improving students' initial reading ability. Meanwhile, the N-Gain value in the control group was 44%, including the medium category, which shows that conventional learning is able to improve students' initial reading skills, but the improvement is not optimal.

The difference in N-Gain values between the two groups showed that the improvement in students' reading ability in the experimental group was greater than in the control group. These findings indicate that the application of Synthetic Analytical Structural (SAS) methods makes a more effective contribution in helping students recognize simple letters, syllables, words, and sentences. Through systematic structural, analytical and synthetic stages, students can understand the relationship between letter symbols and sounds more easily so that the reading process becomes more meaningful and directed.

Thus, the N-Gain results reinforce the findings of previous statistical tests that the Synthetic Analytical Structural (SAS) method not only produces a significant difference in final scores, but is also able to provide a higher increase in initial reading ability compared to conventional learning.

c. Data Normality Test

As one of the requirements for parametric analysis, a normality test is carried out to ensure that the research data has a normal distribution. The Shapiro-Wilk method was used for testing in this study. If the significant value is more than 0.05, the data is said to meet the assumption of normality.

Table 4. Normality Test Results

	Classes	Shapiro-Wilk		
		Statistics	df	Sig.
Results	Pretest AL (Control)	.955	15	.608
	Posttest AL (Control)	.944	15	.438
	Pretest B (Experiment)	.936	15	.332
	Posttest B (Experiment)	.948	15	.495

The significance value for the pretest data in the experimental class was 0.332, while in the control class it was 0.608. In contrast, the significance value for the posttest data in the control class was 0.438, while in the experimental class it was 0.495. The research data can be said to be distributed normally.

d. Data Homogeneity Test

To ascertain whether the variance of the experimental group and the control group was identical, homogeneity testing was performed. With the help of statistical software, this test uses the Levene approach.

Table 5. Homogeneity Test Results

		Living Statistic	df1	df2	Sig.
Results	Based on Mean	.148	1	28	.704
	Based on Median	.072	1	28	.791
	Based on Median and with adjusted df	.072	1	25.347	.791
	Based on trimmed mean	.132	1	28	.719

A significance value of 0.704 is shown in the analysis results. The variance between the two groups can be considered equivalent because this value exceeds 0.05. As a result, one of the key assumptions in parametric test analysis is fulfilled by the data. The homogeneity results have important implications for hypothesis testing using independent sample t-test. The significance

value of the Levene's Test of 0.704 > 0.05 indicates that the variance of the experimental group and the control group is homogeneous or equivalent. With the fulfillment of the homogeneity assumption, the independent sample t-test analysis can be carried out using the assumption of *equal variances assumed*. This condition shows that the difference in results obtained at the posttest stage is not affected by differences in data diversity between groups, so that the results of the t-test used to test the influence of the Synthetic Analytical Structural (SAS) method on students' initial reading ability can be considered valid and have a better level of confidence.

e. T-test Analysis Results

Before the treatment was given, an independent sample t-test was carried out on the pretest score to find out whether the initial reading ability of students in the experimental group and the control group was in the same condition. The results of the analysis showed a significance value of > 0.05 so that there was no significant difference between the initial ability of the two groups. Thus, the experimental group and the control group can be considered to have relatively similar initial capabilities so that they are suitable for use as a comparison group in this study. The following is a table of the results of the pretest and posttest t-test analysis:

Table 6. Independent Sample T-test Pretest Test Results

Classes	t	df	Sig. (2 tailed)	Mean Difference	Remarks
Pretest A (Control)	1.246	28	.223	2.667	There is no significant difference
Pretest B (Experiment)	1.246	27.571	.223	2.667	

Hypothesis testing was conducted using an independent-samples t-test to compare learning outcomes between the experimental and control groups.

Table 7. Independent Sample Test Posttest Results

Classes	t	df	Sig. (2 tailed)	Mean Difference	Remarks
Posttest AL (Control)	-5.619	28	.000	-8.800	Ha accepted
Posttest B (Experiment)	-5.619	27.526	.000	-8.800	Ha accepted

The results showed a significance value of $0.000 < 0.05$. A calculated t-value of -5.619 with a degree of freedom (*df*) of 28 showed a significant difference between the experimental group and the control group. Thus, an alternative hypothesis (*Ha*) is accepted, so it can be concluded that the

Structural Synthetic Analysis (SAS) method affects students' reading skills. In addition, the effect size calculation using Cohen's *d* obtained a value of 2.05. Based on Cohen's criteria, the *effect size* value of 2.05 is included in the very large effect category. This shows that the Synthetic Analytical Structural (SAS) method has a very strong impact on improving the initial reading ability of students in grade I of MIS Al-Khairi.

The results of the observation showed that the application of the Structural Synthetic Analytic (SAS) method during the learning process went well. Teachers carry out the learning stages according to the syntax of the Structural Synthetic Analytic (SAS) method, namely the presentation of whole sentences, sentence analysis into words, syllables and letters, and synthesis back into a complete sentence form. During the learning process, students show sufficient involvement; they seem more enthusiastic when participating in learning using the Structural Synthetic Analytics (SAS) method compared to previous learning. Most students actively follow the teacher's instructions, are able to identify the letters and syllables displayed, and participate in reading activities together and independently. Student activity was seen to increase from each meeting, especially in the ability to recognize the relationships between letters, syllables and words. The findings from these observations support the results of tests showing an improvement in initial reading ability in the experimental group after being treated with the Structural Synthetic Anaitics (SAS) method.

Discussion

The results of the study show that the Synthetic Analytical Structural (SAS) method has a significant effect on the initial reading ability of grade I students of MIS Al-Khairi. The significant influence of the Structural Analytic Synthetic (SAS) method on initial reading ability can be explained through the characteristics of systematic and gradual learning. In the Structural Analysis Synthetic (SAS) method, students are first introduced to meaningful whole sentences, then directed to analyze sentences into words, syllables and letters (Purnamasari et al., 2025). After the analysis process is completed, students rearrange the elements of the language into a complete form through the synthetic stage. This stage allows students to understand the relationship between language symbols and meanings in a more structured way so that the decoding process becomes easier to do. This condition has an impact on increasing students' ability to recognize letters, read syllables, read words, and understand simple sentences.

These findings can be seen from the difference in the average posttest score between the experimental group and the control group, the higher N-Gain value in the experimental group, and the Cohen's *d* value of 2.05 which is included in the very large effect category. These results show that the Synthetic Analytical Structural (SAS) method not only provides a statistically significant difference, but also has a very strong influence practically on the improvement of students' initial reading ability.

The effectiveness of the Structural Analytic Synthetic (SAS) method can be explained through systematic learning stages. Students are invited to understand the relationship between letters, tribes, words and sentences gradually so that the decoding process becomes easier to do (Maya Sari, 2022). In the Structural Analysis Synthetic (SAS) method, students first understand the meaning of sentences before analyzing words, syllables, and letters (Mindaudah, 2022). Thus, students not only memorize letter shapes, but also understand their functions and relationships in the form of words and sentences.

The findings of this study are in line with the theory of early reading which states that reading ability develops through the process of letter recognition, sound combination, word formation, and understanding meaning in stages. Through structural, analytical and synthetic stages, the SAS method facilitates the development of students' decoding skills so that they can more easily recognize letters, combine syllables and read words fluently.

Judging from the theory of language development, the Structural Analytic Synthetic (SAS) method provides a meaningful context in the reading learning process. Students are introduced to whole sentences that have meaning before learning the elements of the drafting. This process helps students connect the forms of language and the meanings they understand so that the development of language skills takes place more naturally and contextually (Hidayat et al., 2025). From a cognitive theory perspective, synthetic analytical structural methods (SAS) encourage students' active involvement in processing information. (Murtafiah, 2024).

The results of this study are also in line with previous research which found that the Structural Analytics Synthetic (SAS) method is effective in improving the initial reading ability of elementary school students (Silfiyah et al., 2021). The similarity of these results shows that Structural Analytical Synthetic methods (SAS) have consistency of effectiveness in various learning contexts. However, this research makes a new contribution because it was carried out in a private Madrasah Ibtidaiyah with heterogeneous initial abilities of students, including students who still have

difficulty recognizing letters.

The magnitude of Cohen's d value of 2.05 indicates that the influence of the Structural Analytical Synthetic method is not only statistically significant, but also very strong practically. The very large effect size value indicates that the difference in reading ability between the experimental group and the control group is not only due to data variation, but is actually influenced by the application of the Structural Synthetic Analytic (SAS) method during the learning process. These findings strengthen the argument that the Synthetic Analytical Structural (SAS) method is one of the effective strategies to improve the initial reading ability of elementary school students.

The implications of this study show that the selection of the right learning strategy has a great influence on the success of students' initial reading. Practically, the results of this study show that early grade teachers need to implement systematic and meaningful reading learning. The Structural Method of Synthetic Analytics (SAS) can be an alternative learning strategy because it helps students understand the relationships between letters, syllables, words, and sentences gradually. In addition, the results of this research can be considered for schools in designing programs to improve reading literacy in the early grades. (Huplan and aL., 2025). For curriculum developers, the results of this research can be the basis for strengthening the use of analytical and synthetic process-based reading approaches in Indonesian language learning in early grades. In addition, initial reading teacher training needs to emphasize the skills of applying the SAS method so that teachers are able to provide reading learning that is more effective and in accordance with the needs of students.

This study has several limitations that need to be considered in interpreting the research results. First, the relatively small number of samples means that the results of the study cannot be generalized widely. Second, the limited duration of treatment has not allowed researchers to observe the long-term impact of using the SAS method. Third, the research was only conducted in one madrasah so that the characteristics of students and the learning environment may be different from other schools.

CONCLUSION

Based on the results of the study, the Structural Synthetic Analytic (SAS) method has been proven to have a significant effect on the initial reading ability of grade I students of MIS Al-Khairi. The application of the SAS method resulted in a higher increase in reading ability compared to

conventional learning, as shown by the N-Gain value of 76% and Cohen's d of 2.05 which is included in the very large effect category. These findings suggest that the SAS method is effectively used to help students recognize letters, read syllables, read words, and understand simple sentences. Therefore, the SAS method can be used as an alternative to the initial reading learning strategy at the elementary school and madrasah ibtidaiyah levels. Further research is suggested involving a larger sample and a more diverse school context to reinforce the generalization of the research results.

This research is also expected to be a reference for future researchers in developing the application of the SAS method in a broader context. The next research can examine the use of SAS-based digital media to increase students' interest and reading ability. In addition, the SAS method can also be applied to various levels of education and different school characteristics so that more diverse and comprehensive research results are obtained.

REFERENCES

- Aina, T., & Devianty, R. (2025). The Influence of Big Book Media on Early Reading Ability in Grade 1 of Elementary School. 8, 282–289.
- Andina Halimsyah Rambe, Y. (2025). The Effect of the Teaching at the Right Level (TaRL) Approach with the ADaBTa Method on the Initial Reading Ability of Grade 1 Students of MIS ANNUR, Medan Labuhan District. 3(2), 175–188.
- Bellasonya, R., & Zaini, D. (2024). Development of Picture Word Card Learning Media (Flash Card) to Improve Reading Skills at the Beginning of Class I MIN 4 Medan City. 10(1), 209–221.
- Fadila, N. R., & Syam, S. S. (2025). Analysis of Early Reading Ability in Grade I Elementary School Students: Cognitive and Psychomotor Perspectives. Sec. 3.
- Hazimah, A., Reviel, D., Aprilia, L., Yuhdi, A., & Medan, U. N. (2024). The Information Behind Children's Language Acquisition: An In-Depth Review. 4(5), 2245–2260. <https://doi.org/10.47467/elmujtama.v4i5.3212>
- Hidayat, P. W., Muhammadiyah, U., & Bungo, M. (2025). Application of the SAS (Structural Synthetic Analytics) Method to Improve Initial Reading Ability in Class II SDN 235 / VI Tanjung Mudo II. 1(1), 164–173.
- Huplan, Iwan, S., & Hetilaniar. (2025). Efforts To Develop Teacher Professionalism In Improving The Quality Of Learning. Sec. 10.
- Khairina, A., & Nasution, S. (2024). The Use Of Flipbook Media In Improving Students' Reading Ability Is In. 10(1), 97–106.
- Kusumawati, T. I., Yumni, A., & Lubis, D. C. (2025). Development of Word Square Media to Overcome Reading Difficulties for Grade II Students in MIN 4 Medan City. pp. 2(02), 1193–1200.
- Masriana, & Riris Nurkholidah Rambe, Z. (2025). The Effect of the SAS (Structural Synthetic Analytics) Method on Initial Writing Skills in Grade II Students of MIN Medan City. 3(2), 197–212.
- Maya Sari, R. (2022). The Effect Of Synthetic Analytical Structural Methods (Sas) On The Initial

- Reading Ability Of Indonesian Language Subjects Of Grade 1 Elementary Students. 1, 101–105.
- Mindaudah, D. E. N. D. (2022). The Use Of The Sas (Synthetic Analytical Structure) Method In Learning Indonesian Language In Reading The Beginning Of Grade Ii Students Of Sdn Pucangro 2 Gudo Jombang. 6, 12915–12920.
- Murtafiah, E. (2024). The Effect of Synthetic Analytical Structural Methods (SAS) on the Initial Reading Ability of Grade I Students of SD Negeri Madyotaman No. 38 Surakarta for the 2022/2023 Academic Year. 8(38), 8118–8127.
- Muthi, I. (2025). Improving the Reading Ability of Grade I Elementary School Students through Syllables in Indonesian Language Subjects. September.
- Nirwana Anas, S. (n.d.). Communication between Cognitive and Language Skills. 1–8.
- OECD. (2022). PISA 2022 Results: Vol. I.
- Olivia, S. (2023). Descriptive Study of Initial Reading Ability at Tunas Bangsa Kindergarten Banyuurip Tuban. 12(1), 1–7.
- Purnamasari, E., Handini, O., & Hastini, D. (2025). The Effect of the Media Education Card-Assisted SAS Method on the Initial Reading Ability of Grade 1 Students at SD Negeri Joglo Surakarta for the 2024/2025 Academic Year. *Al-Madrasah Journal of Education Madrasah Ibtidaiyah*, 9(4), 1942. <https://doi.org/10.35931/am.v9i4.5413>
- Rahma, M., & Dafit, F. (2021). Analysis of Reading Difficulties At The Beginning of Grade 1 Elementary School Students. 13(2), 397–410. <https://doi.org/10.37680/qalamuna.v13i2.979>
- Rahmayanti Fitria Purba, T. I. K., & Aufa. (2024). The Influence of Big Book Learning Media on Initial Reading Ability in Indonesian Language Subjects of Grade II Students of Al-Asri Private Islamic Elementary School. 2(2).
- Rambe, R. N., Munthe, A. R., & Hayden, A. (2023). Analysis of Optimizing School Literacy on Reading Interests of Elementary School Students. 3(2), 950–956.
- Safran, Ayu Annela. (2023). Analysis of Early Reading Difficulties for Elementary. 5(2), 466–484. <https://doi.org/10.37680/scaffolding.v5i2.3121>
- Silfiyah, A., Ghufro, S., Ibrahim, M., & Mariati, P. (2021). Volume 5 Number 5 of 2021 Pages 3142 - 3149. 5(5), 3142–3149.
- Wahyu Nurhayati, Nurbaiti Astuti, I. I. K., & Assessment. (2024). Learning from National Assessment and PISA (Vol. 24).
- Yusnaldi, E. (2018). The Effect of Learning Media Use and Reading Interest on Listening Ability at PGMI UIN North Sumatra. VIII(2).