



Improving Beginning Reading Skills Using Structural Analytic Synthetic (SAS) Methods in Elementary Schools

Suci Ika Rahmi¹, Yanti Yandri Kusuma², Iis Aprinawati^{3*}

¹ (PGSD, Universitas Pahlawan Tuanku Tambusai, Indonesia).

^{2,3} (Dosen PGSD, Universitas Pahlawan Tuanku Tambusai, Indonesia).

* Corresponding Author. E-mail: suciikarahmi9@gmail.com

Receive: 07/08/2022

Accepted: 27/09/2022

Published: 01/10/2022

Abstract

This study aims to determine the improvement of students' initial reading skills on the theme of me through the Synthetic Structural Analytical Method (SAS) in grade 1 of the State Elementary School 001 Pulau. This research is a classroom action research. The subjects of this research are teachers and students. Meanwhile, the object of this research is the Structural Analytical Synthetic (SAS) method and the students' initial reading skills. This research was carried out in 2 cycles, each cycle was carried out in 2 meetings. Data collection techniques used in this study were observation, tests and documentation. Based on the results of the study that before the action 2 students or 10% were in the complete category and 17 students or 89% were in the incomplete category. Then corrective action was taken using the Structural Analytic Synthetic (SAS) method. In the first cycle of students' initial reading skills there was an increase, 4 students or 22% were in the complete category and 14 students or 77% were in the incomplete category. In cycle II, the students' initial reading skills increased again to 16 students or 88% were in the complete category and only 2 students or 11% were in the incomplete category. Thus, it can be concluded that the Structural Analytical Synthetic (SAS) method can improve students' initial reading skills on the theme of me in grade 1 of the State Elementary School 001 Pulau.

Keywords: *Beginning Reading Skills, Synthetic Structural Analytical Method (SAS)*

The Introduction

realization of quality education has relevance to the needs and characteristics of students who are able to compete in the development of science and technology in the era of globalization, and are able to create a society that has the ability to read. Reading is the most important part in the academic development of a child at school age. According to Far (in Dalman, 2013) revealed "*reading is the heart of education*" meaning reading is the heart of education.

The development of middle and late elementary school children takes place at the age of 6 to 11 years, they begin to have to master basic skills, one of which is reading which is used to enter the wider world with their culture and begin to pay attention to achievement and self-control. According to Aprinawati (2017) reading is essentially a process of understanding and reconstructing the meaning contained in the reading text which is a reciprocal interaction, active interaction and dynamic interaction

between the basic knowledge possessed by the reader with sentences of facts and information contained in the reading text.

Beginning reading skills are the provision or key to student success in education at school. Beginning reading is given to lower grade students, namely for the rest of grades I and II of elementary school. In this case, students are able to change written symbols into meaningful sounds. If students have difficulty in reading the beginning, then students will also have difficulty in other subjects. In other words, early reading skills will affect other eyes, because early reading is the beginning or basis for students to master various fields of study and reading skills at the next level. From the above opinion, it can be concluded that early reading skills are students' skills in changing written symbols into sounds such as reading with clear and precise pronunciation and intonation. Beginning reading is the first activity that is taught to lower grade students, namely when

students start entering elementary school. Beginning reading is expected to be mastered by all lower grade students because later it will become the foundation or basis for reading skills at the next level.

Based on the results of field observations carried out on February 25, 2021 in class I of the State Elementary School 001 Pulau to 19 students through interviews which showed that the initial reading ability of class 1 students was still low, including 2 students out of 19 students were able to read well. , while 17 students out of 19 students are still not able to read well. Children who have not been able to read well are divided into several categories including those who do not know letters, cannot distinguish letters, cannot string letters into a word and many are still not fluent in reading a sentence.

Furthermore, the results of observations made at the 001 Pulau State Elementary School on February 25, 2021 showed the type of initial reading skill, namely being able to pronounce letters, 9 out of 19 total students could pronounce letters well, only three students were still unable to pronounce letters. The second type of initial reading indicator is being able to read letters, 6 students out of 19 total students can read letters well, only five students can't read letters well. The third type of early reading indicator is able to string letters into syllables, students who can string letters into syllables are only 4 students out of a total of 19 students. The fourth type of indicator is being able to string syllables into words, at this stage only 3 students can string syllables into words. The rest still can't do well. Indicators of pronouncing letters from 19 students there are 2 students who have completed only one person who is incomplete. So that in the implementation of the research, the indicator of pronunciation of letters was not examined again because it had fulfilled the classical completeness set by the researcher. So in the implementation of the research, only three indicators will be assessed, namely reading letters, stringing letters into syllables, stringing syllables into words.

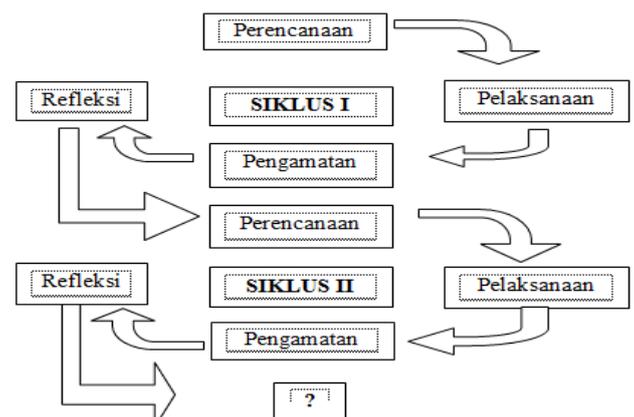
According to Solchan (in Sari et al., 2020) the SAS method is a method that starts learning by displaying and introducing a complete sentence. Whole sentences that are used as basic pillars are broken down into smaller language units called words. This analysis or decomposition process continues until it comes to the smallest unit of language that cannot be described anymore, namely the letters. From the above opinion, it can be concluded that the SAS method is a method that can be used in early reading learning activities in low grade which basically has stages, namely the initial stage of displaying the whole and introducing a complete sentence, then doing a decomposition and synthetically combining it back

into form. restructure. To achieve a good learning process and make it easier for students to read, the technique of implementing the SAS method of learning is reading skills using letter cards, syllable cards, word cards and sentence cards, educators and some students stick words arranged so that they become meaningful sentences.

The purpose of this study was to describe the planning for improving synthetic analytical structural methods in grade 1 students of SD Negeri 001 Pulau, to describe the implementation of improving synthetic analytical structural methods in grade 1 students at SD Negeri 001 Pulau, and to describe the results of early reading learning for students in grade 1 SD. Negeri 001 Island with improved synthetic analytic structural methods.

The Methods

Researcher used the Classroom Action Research (CAR) research method. According to Marta (2017) classroom action research is practical research that aims to correct deficiencies in classroom learning by taking certain actions in order to improve classroom learning practices in a more professional manner. Further more, Fadhilaturrahmi (2017) also suggests that classroom action research is research conducted by designing, implementing and reflecting collaborative and participatory actions that aim to improve the learning process in the classroom through an action in a cycle. This research was conducted in the odd semester in August and September of the 2021/2022 academic year at the 001 Pulau State Elementary School in grade 1 children, Bangkinang sub-district, Kampar Regency. The subjects taken in this study were the first grade students of SD Negeri 001 Pulau Bangkinang District with a total of 18 students, 11 female and 8 male. This class action research procedure was in the form of cycles, each cycle there were 2 meetings consisting of four stages, namely planning (*planning*), action (*acting*), observation (*observer*), and reflection (*reflection*). The following is the CAR procedure depicted in Figure 1 regarding the CAR cycle.



Sumber: Arikunto, 2019

Figure 1. Classroom Action Research Cycle

Procedure Classroom Action Research (CAR) consists of pre-action and cyclical action research. The study started from the researcher conducting observations and interviews to see the condition of student learning, this was in the practical activity. After getting the information, the researcher summarizes all the information to determine what solutions can be given. Furthermore, the researchers carried out planning starting from preparing lesson plans, materials, media, evaluation tools, and teacher and student observation sheets. At the action stage, the researcher applies the pre-planned planning. The implementation of this action was made in 2 cycles, which consisted of 2 meetings. In the first cycle, learning was carried out using the synthetic analytical structure method. The second cycle of learning implementation still uses the SAS method and is based on reflection in the first cycle. If there is no improvement in the second cycle, then it will be continued in the next cycle. The next stage is observation which aims as an assessment tool to measure individual behavior or the process of an activity being observed. The last stage is reflection, this is done to analyze data from student learning research results so that researchers can make improvements in the second cycle so that its implementation is more effective. If it has not been achieved, the researcher will do the next cycle.

The data collection techniques of this research are observation, documentation and tests. The research instrument used was teacher and student observation sheets and a reading test using the SAS method. The rubric for students' reading skills that have previously been validated by researchers with several experts are as follows:

Table 1. Beginning Reading Skills Assessment Rubric

No	Aspect observed	Score	Conversion
----	-----------------	-------	------------

1.	Can pronounce letters	4	Very good , Students can pronounce letters with (articulation) pronunciation of letters that are precise, clear, and fluent
		3	Good , Students can pronounce letters with (Articulation) Pronouncing the letters correctly but not fluently
		2	Enough , Students still stammer in pronouncing letters
		1	Less , Students in pronouncing letters are not clear in (Articulation) pronouncing letters
2.	Can read letters	4	Very good , Students can read letters with proper, clear, and fluent pronunciation (articulation)
		3	Good , students can read letters with (articulation) pronunciation of letters correctly but not fluently
		2	Enough , students still stammer in reading letters
		1	Less , Students in reading letters are not clear in (articulation) pronunciation of letters
3.	Can string letters into words	4	Very good , Students can arrange letters into syllables with (articulation) proper word pronunciation and (Suprasegmental) can be understood

		3	Good, Students can assemble letters into syllables with (articulation) the correct pronunciation of words but (Suprasegmental) cannot be understood
		3	Enough, Students are still stammering in assembling letters into words
		1	Less, Students in stringing letters into syllables are not clear in (Articulation) pronunciation of words
4	Can string syllables into words	4	Very well, Students can assemble syllables into words with (articulation) pronunciation of the word pat and (Suprasegmental) can be understood
		3	Good, Students can string syllables into words with (articulation) the right word pronunciation but (Suprasegmental) cannot be understood
		2	Enough, Students are still stammering in assembling syllables into words
		1	Less, Students in assembling syllables into words that are not clear in word pronunciation (articulation)

Source: Ministry of National Education, (2008:37) and Researcher Modification

As for knowing the students' initial reading ability through learning that applies the SAS method, it can be calculated using the following formula:

$$NP = \frac{R}{SM} \times 100$$

Source: (Purwanto, 2014)

NP = Percent value sought
 R = Raw score obtained by students
 SM = Maximum ideal score of the test in question
 100 = Fixed number

The categories of initial reading skills are as follows:

Table 2. Category of Beginning Reading Skills

Level of Mastery	Letter Values	Predicate
85 – 100 %	A	Very good
71 – 84 %	B	Good
60 – 70 %	C	Enough
50 – 60 %	D	Poor
50 %	TL	Not much

Source: (Purwanto, 2014)

Data analysis used in this research is quantitative analysis and qualitative analysis. Quantitative analysis was used to analyze the mean and percentage scores of the results of the initial reading skills. This quantitative data analysis contains individual mastery and classical mastery, while the individual learning mastery formula (KB) is:

$$KB = \frac{\text{Acquisition score}}{\text{Max Score}} \times 100$$

Classical completeness (KK) is used to determine the completeness of classical preliminary reading skills, which is 80% of the total number of students who have reached the KKM. The formula used is:

$$KK = \frac{\text{Number of student who completed}}{\text{Totals number of students}} \times 100\%$$

Meanwhile, qualitative data analysis was obtained from the results of observation sheets on the process of learning Indonesian early reading skills using the SAS method.

Results and Discussion

The results of the pre-action description show that the teacher has not used the Structural Analytical Synthetic learning method. In addition, teachers also carry out conventional learning, only using certain methods that are monotonous. Therefore, in this case students are not too enthusiastic and feel bored or bored in participating in Indonesian language learning. The lack of enthusiasm of students in this thematic learning resulted in the students' initial reading skills being low.

Cycle 1

The results of observations of reading skills at the beginning of cycles I and II meetings are as follows:

Table 3. Results of Observations of Reading Skills at the beginning of Cycles I and II meetings

No	Indikator Membaca yang diamati	Hasil Pengamatan Siklus I					
		Pertemuan I		Pertemuan II		Rata-rata Siklus I	
		Jumlah	Persentase (%)	Jumlah	Persentase (%)	Jumlah	Persentase (%)
1	Dapat melafalkan huruf	15	83,33%	16	88,88%	16	88,88%
2	Dapat membaca huruf	12	66,66%	14	77,77%	14	77,77%
3	Dapat merangkai huruf menjadi suku kata	3	16,66%	4	22,22%	4	22,22%
4	Dapat merangkai suku kata menjadi kata	2	11,11%	3	16,66%	3	16,66%
Rata-rata		32	44,44%	37	51,38%	37	51,38%

Source: Processed Results for 2021

The average of students' initial reading skills in the first cycle increased from before the action, namely from 44.44% to 51.38%. Students have begun to be able to read letters, string letters into syllables and string syllables into words.

Based on the results of observing the reading skills of the beginning of the indicator, the results of individual mastery and classical mastery are obtained. For more details, it can be seen in table 4 below:

Table 4. The results of the initial reading skills test

No	Interval %	Pertemuan I		Pertemuan II	
		N	Persentase (%)	N	Persentase (%)
1	85-100 (Baik Sekali)	-	-	1	5 %
2	71-84 (Baik)	2	11%	3	16 %
3	61-70 (Cukup)	8	44%	8	44 %
4	50-60 (Kurang)	8	44%	6	33 %
5	≥ 50	-	-	-	-
JUMLAH SISWA		18	100%	18	100 %
RATA-RATA		59,02%		59,72%	
KATEGORI		Kurang		Cukup	
JUMLAH YANG TUNTAS		2	11%	4	22 %
JUMLAH YANG TIDAK TUNTAS		16	88%	14	77 %

Source: Processed Results for 2021

Based on table 4. The results of the initial reading skill test on average in cycle 1 are in the sufficient category and students' completeness has not yet reached 80% so that it is continued in cycle II.

Cycle II

The results of observations of reading skills at the beginning of cycle II meetings I and II are as follows:

Table 5. Results of Observations of Reading Skills at

No	Indikator Membaca yang diamati	Hasil Pengamatan Siklus II					
		Pertemuan I		Pertemuan II		Rata-rata Siklus I	
		Jumlah	Persentase (%)	Jumlah	Persentase (%)	Jumlah	Persentase (%)
1	Dapat melafalkan huruf	18	100%	18	100%	18	100%
2	Dapat membacahuruf	16	88,88%	18	100%	18	100%
3	Dapat merangkai huruf menjadi suku kata	12	66,66%	15	83,33%	15	83,33%
4	Dapat merangkai suku kata menjadi kata	4	22,22%	8	44,44%	8	44,44%
Rata-rata		50	69,44%	56	81,94%	56	56

Source: Processed Results for 2021

Based on Table 5. students' initial reading skills have increased in each indicator. The average of students' initial reading skills in the second cycle increased from the first cycle, namely from 51.38% to 81.94%. Students can read letters fluently, string letters into syllables and string syllables into words. Based on the results of observing the reading skills of the beginning of the indicator, the results of individual mastery and classical mastery are obtained. For more details can be seen in table 6. below:

Table 6. Results of Observation of Beginning Reading Skills

No.	Interval %	Pertemuan 1		Pertemuan 2	
		N	Persentase (%)	N	Persentase (%)
1	85-100 (Baik Sekali)	4	22%	5	27 %
2	71-84 (Baik)	6	33%	11	61 %
3	61-70 (Cukup)	5	27%	-	-
4	50-60 (Kurang)	3	16%	2	11 %
5	≥ 50	-	-	-	-
JUMLAH SISWA		18	100%	18	100 %
RATA-RATA		74,30%		80,90%	
KATEGORI		Cukup		Baik	
JUMLAH YANG TUNTAS		10	55%	16	88 %
JUMLAH YANG TIDAK TUNTAS		8	44%	2	11 %

Source: Processed Results for 2021

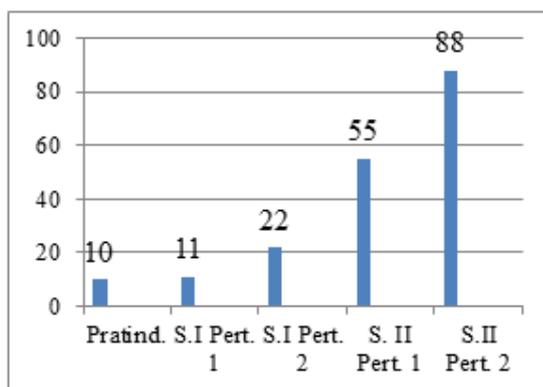
Based on table 6. The results of the average beginning reading skill test in cycle II have increased which are in the good category and students' mastery has reached 88%, it means that they have crossed the limit of classical mastery so that this research is stopped. The comparison of the percentage of students' completeness starting from pre-action to cycle II is as follows:

Table 7. Comparison of the results of the percentage of student completeness

Keterangan	Pratindakan	Siklus I Pertemuan 1	Siklus I Pertemuan 2	Siklus II Pertemuan 1	Siklus II Pertemuan 2
Persentase Ketuntasan	(10,52%)	(11,1 1%)	(22,22 %)	(55,5 5%)	(88,8 8%)

Source: Processed Results for 2021

Based on table 7. it can be concluded that every action the teacher takes has increased students' initial reading skills. The following can be seen a graph of the completion of students' initial reading skills, namely:



Graph. 1 Comparison of the percentage of students in each cycle

Discussion

Based on the results of the research that has been obtained, several things that will be discussed related to this research are:

Planning for the implementation of cycle I and cycle II in Indonesian language learning with the material I take care of my body class I students at

SDN 001 Pulau using synthetic analytic structural methods, learning cycle I meetings using synthetic analytical structural methods have started to show improvement, and cycle II has also increased in the process and student grades from the previous cycle, students are very happy in carry out learning using a synthetic structural analytic method. learning plans need to be made as stated by Suyatno (in Rizal, 2019) every teacher in the education unit is obliged to prepare a complete lesson plan so that learning takes place in an inspiring, fun, challenging, motivates students to participate actively, and provides creativity, and independence according to their talents. and interest.

Before taking action, researchers must first make plans because the learning process needs to be planned, as stated a (Arikunto, 2017) teacher can plan according to CAR such as designing learning scenarios, and setting achievement indicators, and compiling research instruments. As for the plans prepared by the researchers in this study, they were: compiling a syllabus, compiling lesson plans, based on the stages in the synthetic analytic structural method, preparing teacher activity sheets, preparing student activity sheets, asking the class teacher Mrs. Rosnaini, S.Pd. to be an observer observing teacher activities and asking for the willingness of colleagues, namely Fitri Rahmadhoni to be an observer observing student activities, preparing evaluation questions.

The important components in the learning plan include: identity, standard of competition (SK), basic competence (KD), indicators, learning objectives, subject matter, synthetic analytical structural methods, learning steps, learning resources, and assessment.

Based on the assessment made by observer I of the planning carried out by researchers in cycle I, the preparations made by practicing teachers such as the suitability between indicators with SK and KD were appropriate, then the selection of teaching materials was in accordance with the characteristics of students, as well as conformity between the selection teaching materials with time allocation are also appropriate. Furthermore, in the selection of learning media with the suitability of student characteristics, the teacher still has to improve the media used so that all students can see the learning media clearly because the media used at this time is still relatively small and difficult for students to see behind. Overall, the assessment in this plan is quite good although it still needs to be improved. while in cycle II the assessment given by observer I to the planning that has been

carried out is the suitability between the indicators with the SK and the KD is appropriate, then the selection of teaching materials is in accordance with the learning objectives, the selection of teaching materials is in accordance with the characteristics of students, and the suitability between the selection of teaching materials with time allocation is also appropriate. The selection of learning media with the suitability of student characteristics in cycle II is as expected, the teacher has chosen media that is larger than cycle I so that students can see the media to the back. The learning scenario was in accordance with the method used, namely the synthetic analytical structural method. Based on this assessment, it can be concluded that the planning carried out by the researchers in the second cycle was much better than the previous cycle.

The thematic learning process of the material I take care of my body and I'm special by using the synthetic analytical structural method, based on the results of the implementation in the first cycle, learning is still not optimal. Students are expected to increase cooperation and responsibility when given to move forward. This is due to the lack of teacher supervision of students when students are working on group assignments, so that there are still students who do not work in completing their group assignments.

Then another cause is that students are still passive when learning takes place, meaning that students still do not dare to express their opinions when the teacher asks questions about the material being taught. In this case, teachers need to provide more guidance to students, so that students feel comfortable so they dare to express their ideas and opinions related to learning. This is in accordance with what was stated by Budiman (in Suswanto, 2019) that the teacher is a guiding torch for the journey of civilization, he always provides insight, knowledge, and also direction on how to live a better and dignified life.

Based on cycle II, it has been running better than the previous cycle. This is indicated by students paying more attention to the teacher when the teacher conveys the subject matter, students are also more active in the learning process and dare to express their opinions or answer questions given by the teacher. Hamalik (in Kusuma, 2020) suggests that learning is modifying or reinforcing behavior through experience. With evidence that someone has learned is a change in behavior in that person, for example from not knowing to knowing, from not understanding to understanding. In cycle II, students were also able to work well

together with their group mates in working on group assignments.

Based on the results of the implementation in cycle I to cycle II, thematic learning by using this synthetic analytical structural method can increase teacher activity, student activity, and student learning outcomes for grade 1 SDN 001 Pulau.

Improving thematic learning outcomes using synthetic analytical structural methods, based on the data before the synthetic analytical structural methods were applied, it is known that students' understanding of students' learning concepts towards Thematic learning in the material I take care of my body and I am special, with an average classical mastery of 10.52% . This is because so far teachers are still using the old method, and learning is only focused on the teacher while students only take notes, so students feel bored. If the teacher is not able to apply interesting teaching methods, students will quickly feel bored and their enthusiasm for learning will decrease.

The average value of the class from the initial data was 54.01%, it increased in the first cycle of the first meeting by 59.02%, then increased again at the second meeting to 59.72%. Cycle 2 meeting 1 was 74.30% and then increased at meeting 2 to 80.90%, so for 2 cycles this research was carried out because it had been declared complete in classical completeness.

Understanding of student learning concepts in the first cycle of the first meeting has increased from the previous to 44% and at the second meeting to 66%. in the second cycle at the first meeting was 83% and in the second cycle the second woman increased to 88%. Of the 18 people, 16 people have achieved mastery individually, while classical student completeness has reached 88% or only 2 students have not completed, the two students are: SIR and MR with their respective scores, namely SIR with grades 56.25 while the MR 56.25 determined that students' classical completeness was said to be complete if it reached 80%. Based on the classical completeness above, it can be concluded that the names of students who did not complete in cycle II were the same as the names of students who did not complete because during the learning process they were busy playing on their bench which was close together, and one of the students, SIR, was a student. who sits in the back and likes to make noise. addition, the causes of student learning outcomes can be influenced by several factors.

Based on the results of the discussion above, it can be concluded that using synthetic analytical

structural methods can improve students' initial reading on the material I take care of my body and I am special in grade 1 SDN 001 Pulau Kampar Regency Academic Year 2021/ 2022.

Conclusion

Based on the results of data analysis from the research conducted, it was concluded that the application of the SAS method to improve the initial reading skills of first graders at SD Negeri 001 Pulau Bangkinang Sub-district in the material I take care of my body and I specialize in reading a few simple sentences. This can be seen from several improvements that occurred after the application of the SAS method, namely:

The results of observations of activities in improving the SAS method, 54.01% pre-action, in the first cycle of the first meeting 11% with an average student of 59.02%, the first cycle of the second meeting 22.22% with an average of 59.72 students, and increased in the second cycle of the first meeting to 55.55% with an average of 74.30% and the second cycle of the second meeting to 88.88% with an average of 80 students, 90%. the use of the SAS method can improve the initial reading skills of grade 1 students at SDN 001 Pulau Bangkinang District, Kampar Regency with the meaning that the action hypothesis can be accepted..

Daftar Pustaka

- [1] Aprinawati, I. (2017). Improving Reading Skills by Using the Role Playing Method in Class I SDN 001 Bangkinang. *Gazette of Educational Sciences*, 46(1), 16–22.
- [2] Arikunto, S. (2017). *Research Procedures A Practical Approach*. Rineka Cipta.
- [3] Dalman. (2013). *Reading Skills*. Raja Grafindo Persada.
- [4] Fadhilaturrahmi, F. (2017). Application of Scientific Approach to Improve Students' Mathematical Communication Ability in Elementary School. *EduHumanities/ Cibiru Campus Basic Education Journal*, 9(2), 109–

- 118.
- [5] Kusuma, Y. Y. (2020). Application of Probing-Prompting Learning Model to Increase Activity. *Review Journal of Education and Teaching*, 3, 46–54.
- [6] Marta, R. (2017). Improving Mathematics Learning Outcomes With Think Pair Share Type Cooperative Models in Elementary Schools. *Scholar's Journal: Journal of Mathematics Education*, 1(2), 74–79.
- [7] Purwanto. (2014). *Evaluation of Learning Outcomes*. Pustaka Belajar.
- [8] Rizal, M. S. (2019). Improving Beginning Reading Ability Using Structural Analytical Synthetic (Sas) Method For Class I Students Of Sdn 81 Pekanbaru. *Journal Of Review Of Education And Teaching*, 2(2), 253–258.
- [9] Sari, N., Daulay, M. I., & Nurhaswinda, N. (2020). Improving Beginning Reading Ability Using Synthetic Structure Analysis (SAS) Method in Elementary School. *Journal on Teacher Education*, 2(1), 231–238.
- [10] Suswanto, A. (2019). Teacher Personality Competence (A Theoretical Concept and Its Application in the Formation of Professional Teachers). *Murabbi*, 2(1).Kompetensi Kepribadian Guru (Suatu Konsep Teoritis dan Aplikasinya Dalam Pembentukan Guru Profesional). *Murabbi*, 2(1).

Author Profile

Suci Ikarahmi was born in Bangkinang October 29, 1999. The second child of three children from Mr. Kasliar and Mrs. Nurhayati. The researcher conducted a study majoring in the elementary school teacher education study program (S1 PGSD) at the Hero University Tuanku Tambusai until 2021.