



The Effectiveness of the Montessori Method on the Initial Reading Ability of Grade 2 Students SDN 2 Karanggondang Jepara

Mustagfirotun Nikmah*, Muhammad Misbahul Munir, Dwiana Asih Wiranti

Program Studi Pendidikan Guru Sekolah Dasar, Universitas Islam Nahdlatul Ulama Jepara, Indonesia

*Email: 211330000850@unisnu.ac.id

Informasi Artikel

Abstrak

Keywords:

Montessori Method;
Early Reading;
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Penelitian ini bertujuan untuk menganalisis efektivitas metode Montessori dalam meningkatkan kemampuan membaca awal siswa kelas 2 SDN 2 Karanggondang Jepara. Penelitian ini menggunakan desain One Group Pretest-Posttest dengan melibatkan 32 siswa sebagai subjek penelitian. Data dikumpulkan melalui tes pilihan ganda dan dianalisis menggunakan Paired Sample T-Test. Hasil penelitian menunjukkan adanya peningkatan kemampuan membaca siswa yang signifikan, dengan rata-rata skor pretest 62,44 meningkat menjadi 82,72 pada posttest, dengan taraf signifikansi 0,000 ($< 0,005$). Indikator peningkatan tersebut meliputi pengenalan huruf, penyusunan suku kata, membedakan kata yang bunyi huruf awalnya mirip, dan menyusun kata kompleks. Pendekatan berbasis sensori dan individual dalam metode Montessori terbukti efektif dalam menciptakan suasana belajar yang menarik dan meningkatkan keterlibatan siswa. Penelitian ini merekomendasikan penerapan metode Montessori untuk meningkatkan keterampilan membaca awal pada jenjang pendidikan dasar.

Abstract

This study aims to analyze the effectiveness of the Montessori method in improving the initial reading ability of 2nd grade students of SDN 2 Karanggondang Jepara. The research uses *the One Group Pretest-Posttest* design by involving 32 students as research subjects. Data were collected through a multiple-choice test and analyzed using *the Paired Sample T-Test*. The results showed a significant improvement in students' reading ability, with an average pretest score of 62.44 increasing to 82.72 in the posttest, with a significance level of 0.000 (< 0.005). Indicators of improvement include letter recognition, syllable arrangement, distinguishing words with similar initial letter sounds, and composing complex words. The sensory-based and individualized approach in the Montessori method has proven to be effective in creating an engaging learning atmosphere and increasing student engagement. This study recommends the application of the Montessori method to improve early reading skills at the primary education level.



INTRODUCTION

Reading is one of the language skills that has a crucial role in basic education. Good reading skills at the primary school level are a key factor for academic success at higher education levels (Sarika et al., 2024). The main component in reading is intrinsic motivation which is influenced by the purpose of the activity. The pleasure of reading can be felt by those who are able to analyze the content of the reading and understand the overall purpose. Students with good reading skills are able to know and absorb information effectively. The main challenge in teaching reading is creating engaging and interactive learning for students. The main purpose of reading is to understand the content of the text thoroughly. In addition, reading also provides various benefits that can be felt in students' lives (Salsabila et al., 2020). Parents also play an important role in teaching reading at home because this activity supports the mastery of knowledge and helps students in exploring things that interest them. Teaching children requires high patience, good mastery of the material, and the courage to innovate and be creative in order to create interesting learning for them (Munir & Wiranti, 2019). Reading involves vision and thinking skills, as well as the process of recognizing spoken words through simple writing (Amalia & Kurniawan, 2021). Schools play an important role in developing the nation's next generation by providing adequate education, including in reading skills.

Initial reading skills are very important for students to master, including recognizing letters or combinations of letters and combining sounds into syllables or words (Wiranti et al., 2023). Indicators of early reading include recognizing vowel and consonant symbols, arranging syllables into words, distinguishing words with the same prefix, and reading more complicated words, such as words with two syllables (Gisela et al., 2023). This skill is fundamental as a basis for students to acquire knowledge. One of the crucial aspects in teaching beginner reading at a low level is the ability of students to read simple words and sentences clearly. This skill is an important requirement to proceed to a more complex reading stage (Nie et al., 2022). Therefore, elementary school students who are not proficient in reading will experience obstacles in understanding the subjects in the next class. The variety of learning methods in delivering material will be more interesting for students and easier to understand so that it can create a more dynamic classroom atmosphere (Munir et al., 2022). This innovation is expected to increase learning activities. The application of various learning methods not only aims to improve reading ability, but also to attract students' attention by involving cognitive, affective, and psychomotor aspects. One of the approaches applied to develop initial reading skills is the *Montessori* method (Qarimah et al., 2022).

The *Montessori* method was developed by Maria Montessori to introduce an educational approach that involves students' sensory abilities and motor skills through the use of special props in their home environment (Alifia et al., 2023). Maria Montessori argues that when students are given the right environment, they tend to engage in spontaneous activities. This method focuses on children (*child-centered*) and uses learning aids called *apparatus*, which support the learning process naturally (Isabelle, 2022). In addition, the *Montessori* method is applied to children in the lower grades and is based on the theory of constructivism and child development. This theory emphasizes that students learn through hands-on experience and actively while building their own understanding. Maria Montessori focuses this approach on self-directed and child-centered learning, thus supporting their cognitive, social, and emotional development according to each student's developmental stage (Azkia & Rohman, 2020). This method not only emphasizes real learning, but also on student development. Thus, learning activities become more interesting and motivate students to make reading a fun activity (Ernawati, 2021).

According to the results of observations and interviews that have been carried out with 2nd grade teachers of SDN 2 Karanggondang, it is known that out of a total of 32 students, there are 4 students or about 40% of them still cannot read. The main difficulty students face is distinguishing the symbols of letters with similar shapes, such as 'b' and 'd', 'm' and 'n', and 'p' and 'q'. In addition, students still need help from teachers or classmates when putting words into correct sentences. This condition is also related to the teaching methods applied by teachers. The urgency of this study lies in the fact that good reading skills

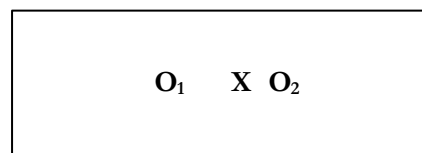
at the primary school level are the key to academic success at higher education levels. However, there are still students who have difficulty reading, especially in distinguishing similar letters, composing words, and reading simple sentences. Conventional teaching methods that lack innovation also contribute to students' low reading ability. This research focuses on improving the initial reading ability of 2nd grade students of SDN 2 Karanggondang Jepara through *the Montessori* method. This method focuses on experiential learning that is tailored to the individual needs of students, with the aim of improving initial reading skills. Alphabet mastery, especially vowels, is an important basis in reading so that students are able to read texts and words correctly (Agustina et al., 2020).

Various studies have indicated that *the Montessori* method is effective on students' initial reading ability. Previous research by Azkia & Rohman (2020) focused on the implementation of *the Montessori method* through stimulation activities in accordance with Maria Montessori's principles, which have been proven to improve students' reading skills. Research by Ernawati (2021) found that the use of *movable alphabet media in the Montessori method* can affect the initial reading ability of grade I elementary school students. Another study by Syafitri et al., (2024) shows a significant improvement in the ability of *the Montessori* method. Where *the Montessori* method is effective in improving students' early reading ability at SDN Sukakarya 01. Meanwhile, a study conducted by Fauziyyah (2023) explored the application of *the Montessori* method with the media of a card in grade 1 of SDN Surodikraman Ponorogo with the aim of improving students' reading skills. In contrast to the three studies, this study focuses more on the effectiveness of the *Montessori method* in helping 2nd grade students of SDN 2 Karanggondang Jepara overcome difficulties in distinguishing similar letter shapes, with the main goal of improving students' initial reading skills.

Referring to the previous explanation, this study aims to analyze how effective *the Montessori* method is in improving the initial reading ability of grade 2 students at SDN 2 Karanggondang Jepara. It is hoped that this research can provide innovation and expand insight into *the Montessori* method. So that it can enrich readers' knowledge in an effort to design a more efficient learning method and in accordance with the needs of students. Thus, the researcher proposed the title "The Effectiveness of *the Montessori* Method on Initial Reading Ability in Grade 2 SDN 2 Karanggondang Jepara".

METODE

This study uses a quantitative approach with a *One Group Pretest-Posttest* experimental design. The target of this study is focused on all 2nd grade students of SDN 2 Karanggondang Jepara with a total of 32 students. This study uses a saturated sample technique, where all members are the target in the study (Ekawati & Kusumaningrum, 2020). The data collection technique uses 15 multiple-choice questions. Where this test is used to evaluate students' cognitive abilities at different levels of difficulty, namely difficult, moderate, and easy levels in various learning activities (Susana et al., 2023). The research design of *One Group Pretest-Posttest* according to Hartono (2019) is as follows:



Gambar 1. One Group Pretest-Posttest Design

Information:

X = *Treatment*

O_1 = *Pretest score* (before treatment)

O_2 = *Posttest value* (after treatment)

This research includes two types of tests, namely the initial test (*pretest*) and the final test (*posttest*). The data analysis technique with SPSS version 16 which includes various tests such as validity test, reliability

test and hypothesis test with T test (*Paired Sample T-Test*) is used to compare the average results of the *pretest* and *posttest* to obtain conclusions.

RESULTS AND DISCUSSION

The research carried out at SDN 2 Karanggondang Jepara by applying the *Montessori* method showed a significant influence on improving students' initial reading ability. The results of the study with the *One Group Pretest-Posttest design*, can be analyzed to compare the average *pretest* and *posttest* scores of 2nd grade students of SDN 2 Karanggondang Jepara through statistical data. The data obtained can be seen in the following tables 1 and 2:

Tabel 1. Paired Sample Statistics

	Mean	N	Std.Deviation	Std. Error Mean
Pair 1 Pre-Test	62.44	32	13.503	2.387
Post-Test	82.72	32	9.955	1.760

Tabel 2. Paired Sample Test

	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95%Confidence Interval of the Difference		T	df	Sig. (2- tailed)
				Lower	Upper			
Pair 1 Pre-Test Post-Test	-20.281	7.510	1.328	-22.989	-17.574	-15.276	31	.000

Statistical analysis showed a significant increase between the average *pre-test* and *post-test* scores. The average *pre-test* score of 62.44 increased to 82.72 in the *post-test*. The *Paired Sample T-Test* found a significant difference between the two values, with a t-value of -15.276 and a significance level (*Sig. 2-tailed*) of 0.000. Data analysis showed a very significant difference with a 95% confidence level. These findings prove that the *Montessori* method is effective in improving students' initial reading skills.

This study indicates that there is a significant improvement in students' initial reading ability after the application of the *Montessori* method. The increase is reflected in several key indicators, as follows: **First**, the recognition of vowel symbols and consonants. Prior to the *intervention*, students often had difficulty distinguishing similar letters, such as *b* and *d*, *m* and *n* or *p* and *q*. However, after the application of the *Montessori method*, students' ability to recognize and distinguish vowels and consonants gradually improved. This happens because of its sensory, structured, and individualized approach to learning. The application of the *Montessori* method by using aids such as picture letter cards that use singing repeatedly can make it easier for students to understand the shape and remember the letters. This method also emphasizes active engagement, independence, and repetition, so students can be more focused and confident in learning.

Second, the arrangement of syllables into words. Students' skills in arranging letters into syllables and words have improved. For example, students are able to correctly arrange the letters "ba" and "ta" into the word "brick". The use of syllable card aids in the application of the *Montessori* method makes it easier for students to arrange syllables into words. Through this method, students are able to master and form syllable patterns into complex words.

Third, distinguish words with the same first letter. After using the *Montessori method*, students are more skilled in distinguishing words that begin with the same letter but have different meanings, such as "stone" and "clothes". With the help of media or concrete objects around, it makes it easier for students to

distinguish words with the same first letter. This activity also trains students' ability to think logically and pay attention to details in the reading process.

Fourth, read more complex words. The ability to read words with two or three syllables also improved significantly after the application of *the Montessori* method. For example, students who previously had difficulty reading words such as "men-ta-ri" or "pah-la-wan" became more fluent after gaining repeated reading experience using *the Montessori* method. In addition, students are also able to arrange words into a complete sentence.

Referring to the results of the above study, it is shown that the application of the Montessori method significantly improves students' initial reading ability in various aspects, including letter recognition, arranging syllables into words, distinguishing words with the same prefix, and reading complex words. This is in accordance with the research of Syafitri (2024) which explains that, before *the intervention*, students often have difficulty recognizing similar letter shapes. However, the success rate increased from 48.75% to 95% after the application of *the Montessori* method. Another study by Qarimah (2022) showed a significant value of 0.48 in the *Montessori* method. This indicates that this method has an effect on the initial reading ability of grade 1 students. The *Montessori method* with the help of movable alphabet media showed a high average score. Furthermore, Fauziyyah's research (2023) found that student learning completeness increased from 34.78% to 86.95% with the help of *the Montessori* method. These findings confirm that *the Montessori* method is effective in improving students' initial reading skills.

This study emphasizes the importance of innovative approaches in learning to read in elementary schools. This shows that *the Montessori* method is relevant to the needs of students, especially in overcoming challenges such as recognizing letters and composing words. In addition, experiential learning applied in *the Montessori* method allows students to be more active and motivated through hands-on experiences. The results of this study also prove that basic reading skills can be significantly improved with the right methods, so that students are better prepared to face future academic challenges.

The application of *the Montessori* method allows students to learn through activities that involve teaching aids and hands-on experience, thereby strengthening students' understanding of initial reading skills. Some aspects that support *Montessori* method learning include: A student-centered approach can help students build student independence and discipline. In addition, *the Montessori method* helps students understand abstract concepts through hands-on experience. The use of this prop is very effective for grade 2 students who are still in the stage of concrete cognitive development. This makes it easier for students to learn directly with the help of letter, syllable, and word recognition tools and exercises that are designed gradually (Nurlela & Al Mufti, 2023). Meanwhile, a *flexible* and comfortable learning environment for students allows them to study without excessive academic pressure. This encourages students to explore and absorb information in a more effective way and is able to encourage students' enthusiasm for learning.

The Montessori method has a number of advantages in improving reading ability student initiation, especially at the primary education level. This approach focuses on active student engagement through experiential learning, utilizing props and a supportive environment. One of its main advantages is its ability to improve letter recognition, arrange syllables into words, distinguish words with the same prefix, and read more complex words. The sensory-based and individualized learning process is able to attract students' attention and increase their motivation to learn. With the support and guidance of teachers, students can start learning to read optimally according to their respective abilities and learning styles. Adjustment to the individual needs of students and the school environment plays a crucial role in facilitating the reading learning process. In addition, this approach also supports the development of students' social skills and strengthens their confidence during the learning process.

CONCLUSION

The results of this study show that the *Montessori method* is effectively able to improve the initial reading ability of 2nd grade students of SDN 2 Karanggondang Jepara. The average score of the *pre-test* increased from 62.44 to 82.72 in the *post-test* with a significance level of 0.000. These improvements include the ability to recognize letters, arrange syllables into words, distinguish words with similar prefixes, and read more complex words. The sensory-based approach using props has successfully created an engaging learning atmosphere, increased student engagement, and fostered their confidence. Researchers are further recommended to examine the application of this method at other levels of education and develop more economical learning media. Teachers also need to be trained to integrate *Montessori* methods with the curriculum, while schools are expected to provide supporting facilities and involve parents in supporting learning at home. With this approach, students' initial reading skills can be optimally improved.

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