Proximal: Jurnal Penelitian Matematika dan Pendidikan Matematika
ISSN 26158132 (cetak)
ISSN 26157667 (online)

IMPROVING GRADE III STUDENTS' MATHEMATICS LEARNING OUTCOMES IN MULTIPLICATION USING THE JARIMATIKA METHOD

Nanda Aqidah Putri[1], Arini Hidayati [2], Lailatul Qodariyah[3]
Mathematics Education, Faculty of Social and Humanities, Nurul Jadid University[1,2,3]
Email: nandaaqidahputri1203@gmail.com[1], arinda3Lreza@gmail.com[2], laila.haqy2208@gmail.com[3]

Corresponding author: Nanda Aqidah Putri, **Email.** nandaaqidahputri1203@gmail.com

Abstrak. Peningkatan penguasaan operasi hitung dasar, khususnya perkalian, menjadi kebutuhan mendesak dalam pembelajaran matematika di sekolah dasar karena banyak siswa yang masih mengalami kesulitan dalam memahami prosedur numerik abstrak. Kondisi ini berdampak pada rendahnya kemampuan numerasi dan menghambat pencapaian kompetensi matematika pada jenjang berikutnya. Untuk menjawab permasalahan tersebut, penelitian ini bertujuan untuk meningkatkan hasil belajar matematika siswa pada materi perkalian melalui penerapan metode Jarimatika di kelas III Madrasah Ibtidaiyah Nurul Mun'im. Penelitian ini menggunakan pendekatan Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus, di mana setiap siklus meliputi tahap perencanaan, pelaksanaan, observasi, dan refleksi. Subjek penelitian adalah 17 siswa kelas III MI Nurul Mun'im. Data diperoleh melalui tes hasil belajar, observasi, dan dokumentasi. Hasil penelitian menunjukkan adanya peningkatan yang signifikan pada hasil belajar siswa setelah diterapkannya metode Jarimatika. Nilai rata-rata meningkat dari 58 pada pre-test menjadi 74 pada post-test siklus I, dan mencapai 89 pada post-test siklus II. Persentase ketuntasan belajar juga meningkat dari 29% menjadi 59%, dan akhirnya mencapai 100%. Dengan demikian, metode Jarimatika terbukti efektif dalam meningkatkan hasil belajar matematika siswa pada materi perkalian serta dapat dijadikan strategi alternatif untuk memperkuat kemampuan numerasi dasar di sekolah dasar.
Keywords: **Hasil Belajar Matematika, Perkalian, Metode Jarimatika**

Abstract. Improving students' mastery of basic arithmetic, especially multiplication, remains an urgent issue in elementary mathematics education because many students still struggle with abstract numerical procedures that hinder their overall mathematical development. Addressing this challenge, this study aims to enhance students' learning outcomes in multiplication through the application of the Jarimatika method in grade III of Madrasah Ibtidaiyah Nurul Mun'im. The study employs a Classroom Action Research (CAR) design implemented in two cycles, with each cycle consisting of the stages of planning, implementation, observation, and reflection. The participants were 17 grade III students at MI Nurul Mun'im. Data were collected through learning outcome tests, observations, and documentation. The findings indicate a substantial improvement in students' achievement after the introduction of the Jarimatika method. The average score increased from 58 on the pre-test to 74 on the post-test of Cycle I, and further improved to 89 in the post-test of Cycle II. The percentage of students achieving mastery also rose from 29% to 59% and ultimately reached 100%. These results demonstrate that the Jarimatika method is effective in significantly improving students' multiplication skills and can serve as a practical alternative strategy for strengthening foundational numeracy in elementary schools.
Keywords: **learning outcomes, mathematics, multiplication, Jarimatika method, PTK**

A. Introduction

Education has a strategic role in shaping students' critical, logical and creative thinking skills in the modern era. (Hanifa & Syehma Bahtiar, 2024). The government continues to strive to improve the quality of education through the implementation of an adaptive curriculum, improving teacher competency, and developing effective learning innovations at various levels of education, including at the Madrasah Ibtidaiyah level (Suparni, 2018). Mathematics is one of the subjects that plays a crucial role in developing students' rational and systematic thinking skills. Through mathematics learning, students are trained to develop analytical, problem-

https://doi.org/10.30605/proximal.v8i4.7615

solving, and logical reasoning skills as a foundation for mastering various other disciplines. (Jumadiyah & Zumrotun, 2024).

However, mathematics is still often considered a difficult and frightening subject for most elementary school students (Authar et al., 2022). These difficulties are generally caused by low student interest in learning, a lack of varied and engaging learning methods, and material presentation that tends to be abstract and monotonous. One topic that often causes difficulty for third-grade MI students is multiplication (Fitra et al., 2025), This is because most students do not yet fully grasp the basic concepts. They tend to simply memorize products without understanding the meaning of multiplication operations as a form of repeated addition. Based on initial observations in grade III of MI Nurul Mun'im, where this research was conducted, it was found that the average student learning outcomes were still below the Minimum Completion Criteria (KKM), with an average pre-test score of 58. This situation indicates the need for innovative efforts in mathematics learning that are more concrete, engaging, and appropriate to the developmental characteristics of elementary school-aged children.

One relevant alternative learning method to address this problem is the Jarimatika method, a counting technique that utilizes the fingers as a tool to assist in understanding the concept of arithmetic operations, particularly multiplication (Anisa & Heryanto, 2024). This method was discovered by Ms. Septi Peni Wulandani. Although only using their fingers, using the finger arithmetic method, students are able to perform KaBaTaKu (multiplication, division, addition, subtraction) operations up to thousands or even more (Sitio, 2017). This method combines visual and motor aspects, making the counting process easier, faster, and more enjoyable (Indiastuti, 2021). In addition, using fingers as a concrete medium helps students build conceptual understanding before moving on to abstract thinking, in line with Jerome Bruner's learning theory, which emphasizes the importance of the enactive-iconic-symbolic stages in the mathematics learning process. Implementing this method can also increase students' interest and motivation in learning by creating an active and meaningful learning atmosphere (Rahayu et al., 2025).

Concrete approaches such as Jarimatika not only help students understand the concept of multiplication visually and kinesthetically, but also create an active, collaborative, and interactive learning atmosphere (Yudha, 2020). Thus, this method can strengthen two-way communication in the classroom and reduce students' dependence on memorization alone. Research conducted by (Annisa et al., 2025) showed that the application of the Jarimatika method significantly improved student learning outcomes in arithmetic operations at the Muhammadiyah Buntu Barana Elementary School. Similar results were found by (Himmah K et al., 2021) who reported an increase in student motivation and learning outcomes after applying the Jarimatika method to multiplication material. This finding was supported by research (Suparni, 2018) which confirms that the Jarimatika method helps students understand the concept of integers and improves their arithmetic skills in elementary school.

Based on the description above, the researcher conducted classroom action research with the title: "Improving Students' Mathematics Learning Outcomes on Multiplication Material Through the Jarimatika Method in Class III of MI Nurul Mun'im."

The problem formulation in this study is: How can the application of the Jarimatika method improve students' mathematics learning outcomes in multiplication material in grade III MI? The purpose of this study is to determine the improvement in students' learning outcomes after the application of the Jarimatika method in mathematics learning on multiplication material.

The results of this study are expected to benefit various parties. For teachers, this research can provide an alternative, innovative, enjoyable, and easy-to-implement learning method in elementary school. For students, this research is expected to improve their understanding of multiplication concepts and foster motivation to learn mathematics. For schools, the results can

be used as a reference in developing creative learning models oriented towards improving the quality of mathematics learning at the elementary level.

B. Research Methodology

Classroom action research is a scientific effort carried out by educators to improve and enhance the learning process through real action(Hanik et al., 2021). Besides aiming to improve student learning outcomes, classroom action research also plays a role in enhancing teacher professionalism in implementing learning. Classroom action research plays a crucial role in education because it helps teachers find solutions to learning problems that arise in the classroom (Yanti & Nugroho, 2024). Therefore, this study emphasizes the application of the Jarimatika method as an effort to improve students' mathematics learning outcomes (Nasrul Naufal et al., 2023).

This classroom action research was conducted in the mathematics subject of grade III of Madrasah Ibtidaiyah Nurul Mun'im in the odd semester of the 2025/2026 academic year. The subjects of this research were 17 grade III students of MI Nurul Mun'im. The research lasted for two months, namely from August 4 to October 6, 2025. In collecting data, the researcher used observation, testing, and documentation techniques. The instruments used were observation sheets and learning outcome test sheets. The tests used were written tests, the tests were arranged according to the material and learning objectives that correspond to the indicators of the basic competencies selected in this classroom action research.

The data sources in this study were obtained from student learning outcomes, observations of teacher and student activities during learning, and documentation of teaching and learning activities. This study focused on improving student learning outcomes in multiplication through the application of the Jarimatika method.

The data collection methods used in this study were observation and learning outcome tests. Observations were conducted in each learning cycle, both cycle I and cycle II, to obtain information on teacher and student activities during the implementation of the Jarimatika method. Teacher activity observation sheets were used to determine whether learning was implemented according to plan, while student activity observation sheets were used to assess student activity and participation during the activity. The class teacher was responsible for completing the student activity observation sheets, while researchers or other observers assessed the teacher's activities.

The learning outcome test was used to determine students' improvement in multiplication calculations after the implementation of the Jarimatika method. This test consisted of a pretest and a posttest. The pretest was administered before the implementation of cycle I to determine students' basic understanding of multiplication concepts. The posttest was administered at the end of each cycle to measure student learning improvement after the implementation of the Jarimatika method. Each test consisted of 10 essay-style questions of varying difficulty.

In addition, in each learning cycle, the researcher also gave a short quiz containing 10 essay questions to measure students' understanding of the newly taught material and as reflection material for improving actions in the next cycle.

This research was conducted in several cycles, each encompassing four main steps: planning, action, observation, and reflection. The following is a breakdown of the steps in each cycle:

1. Planning
   The planning stage is the initial step after gaining a thorough understanding of the learning conditions and situation in the classroom and its surrounding environment. Some of the steps taken include: a) The researcher has prepared a Lesson Implementation Plan (RPP) for basic multiplication facts using the finger method.

b) Preparing an observation sheet to record student activities during the lesson. c) Preparing test questions. d) Preparing equipment to document learning activities, such as a camera.

2. Action
   The researchers carried out a number of actions, including delivering the material and implementing the learning process according to the previously prepared Learning Implementation Plan (RPP). Furthermore, the researchers administered learning tests to evaluate students' abilities before and after implementing the jarimatika technique. This aimed to measure changes or improvements in students' abilities after receiving instruction using the jarimatika technique.
3. Observation
   The developed plan is translated into actions, and the process of these actions is observed. During this stage, feedback is provided directly to be used as a reference for modifying the plan, if necessary. If the initial plan proves to be inappropriate, changes or re-planning are necessary. During the observation process, the researcher is tasked with observing the course of the action based on previously prepared observation guidelines. This aims to monitor and obtain accurate information regarding the implementation of the action and its effectiveness, allowing for necessary adjustments to the learning plan.
4. Reflection
   Data obtained from the observation phase is thoroughly analyzed. Emerging problems, deficiencies, and all aspects related to the actions taken are evaluated. This process is followed by reflection, which aims to evaluate the process and learning outcomes to generate data and information that can be used as considerations in planning learning for the next cycle.

The multiplication learning process using the Jarimatika method was implemented in one cycle with the aim of increasing multiplication calculation speed. In the next cycle, the same steps will be followed, but there is the possibility of making modifications based on the results of reflection. In other words, the shortcomings and strengths discovered in the previous cycle will serve as the basis for planning for the next cycle. This allows for necessary improvements and adjustments to make the learning process more effective and optimal.

C. Research Results and Discussion

Before implementing the action, the researcher first conducted an initial test (pre-test) to determine students' basic abilities in multiplication operations. Based on the pre-test results, an average score of 58 was obtained with 5 out of 17 students (29%) achieving the Minimum Completion Criteria (KKM $\geq$ 70). These results indicate that most students still experience difficulties in performing multiplication operations quickly and accurately, so it is necessary to implement more interesting and concrete learning methods.

In cycle I, the teacher applied the Jarimatika method with simple learning steps, such as demonstrating the use of fingers as a multiplication tool and basic exercises for multiplying numbers 6 to 9. After implementing the actions in cycle I, a learning outcome test was conducted to determine the development of students' abilities. Based on the results of the cycle I post-test, an average score of 74 was obtained with 10 out of 17 students (59%) achieving the KKM.

These results indicate an improvement from the pre-action phase, both in terms of average grades and the number of students who completed the activity. However, some students still did not fully understand the application of the Jarimatika method to solve more complex multiplication problems. Based on the reflection results at the end of cycle I, the teacher added

learning activities in the form of contextual exercises and pair work to increase student participation and understanding of the Jarimatika steps.

Next, in cycle II, the teacher refined the learning strategy by providing more opportunities for students to practice the Jarimatika method through various problem formats, including story problems and quick calculation games. The teacher also provided individual guidance to students who still had difficulty understanding the concept of multiplication using Jarimatika.

The test results at the end of cycle II showed significant improvement. The average score was 89, with all students (17 out of 17, or 100%) achieving the Minimum Completion Criteria (KKM). This improvement indicates that the implementation of the Jarimatika method is effective in improving students' mathematics learning outcomes, particularly in multiplication.

To clarify the development of student learning outcomes at each stage of action, the following table presents the distribution of student scores per stage of action:

Table 1. Distribution of Student Learning Outcomes Before and After Implementing the Jarimatika Method

Value Range	Category	Number of Pre-Test Students	Number of Students in Cycle I	Number of Students in Cycle II
90 - 100	Very Good	3	3	13
80 - 89	Good	2	7	4
70 – 79	Fair	1	6	0
<70	Poor	11	1	0
Amount	-	17	17	17

Table 1 shows an increase in the number of students scoring in the good and excellent categories at each stage of the action. Meanwhile, the number of students in the poor category continued to decline until there were no students in that category in Cycle II.

To clarify the development of student learning outcomes at each stage of action, the following is a comparative table of student learning outcomes:

Table 2. Comparison of student learning outcomes before and after implementing the Jarimatika method.

Learning Stage	Average value	Number of Completed Students	Completion percentage
Pre-test	58	5 students	29%
Post-test Cycle I	74	10 students	59%
Post-test CycleII	89	17 students	100%

Based on Table 2, there is a significant increase in learning outcomes from pre-action to cycle II. The average student score increased gradually, and the number of students achieving the Minimum Competency (KKM) increased from 5 students (29%) to all students (100%) at the end of cycle II. This increase indicates that the implementation of the Jarimatika method is effective in helping students understand multiplication operations in a concrete and interesting way. In addition, students appear more confident, active, and enthusiastic in participating in learning. Thus, it can be concluded that the Jarimatika method is able to improve learning outcomes and student motivation in the material of multiplication arithmetic operations.

Discussion

The results of the study showed that the application of the Jarimatika method had a significant positive impact on improving the mathematics learning outcomes of third-grade

students of Madrasah Ibtidaiyah Nurul Mun'im on multiplication material. Based on the test results, the average student score increased from 58 in the pre-test, to 74 in the post-test of cycle I, and 89 in the post-test of cycle II. The percentage of learning completion also increased from 29% in the initial condition, to 59% in cycle I, and reached 100% in cycle II. This increase proves that the use of the Jarimatika method is effective in helping students understand the concept of multiplication operations in a more concrete and enjoyable way.

In the initial conditions (pre-test), most students were unable to solve multiplication problems correctly because they still relied on memorizing the product. They tended to experience confusion when working on problems involving larger numbers. This condition indicates that their understanding of the concept of multiplication was still mechanistic, not conceptual. After implementing the Jarimatika method in cycle I, students' abilities began to improve, although some were still incomplete. This was because students were still adjusting to the steps of Jarimatika, especially in memorizing finger patterns and their application to specific numbers.

In cycle II, learning focused on contextual practice and repeated application of Jarimatika steps through pair activities and counting games. The teacher also provided individual guidance to students who were still experiencing difficulties. These improvements in learning strategies significantly impacted student learning outcomes. All students demonstrated increased speed and accuracy in multiplication, and were able to independently explain the finger counting process. This demonstrates that the Jarimatika method not only improves learning outcomes but also strengthens students' conceptual understanding of multiplication operations.

The results of this study align with Jerome Bruner's learning theory, which emphasizes the importance of learning stages from enactive (through direct action) to iconic (through images) and finally symbolic (through symbols or numbers). In this context, the use of fingers as a concrete tool helps students understand the concept of multiplication through direct experience (the enactive stage), before moving on to symbolic representations in the form of numbers. Thus, the Jarimatika method supports conceptual thinking processes in stages and is in line with the cognitive development of elementary school-aged children.

Furthermore, this research reinforces Piaget's view that elementary school-aged students are in the concrete operational stage, where they more easily understand mathematical concepts through real objects and motor activities. Using fingers as a learning medium facilitates this need, making mathematics easier to understand and less anxiety-inducing. This is evident in the increased motivation and active participation of students during the learning process.

Qualitatively, students appeared more enthusiastic and confident in working on multiplication problems. They actively answered teacher questions, discussed with their group mates, and demonstrated a positive, competitive attitude in counting games. These changes in learning behavior indicate an increase in students' intrinsic motivation, which also contributed to improved learning outcomes. Teachers also played a crucial role in guiding and providing appropriate feedback, ensuring an effective learning process.

The findings of this study align with those of Lusiana and Suriadi (2025), who demonstrated that the application of the Jarimatika method can improve students' mathematics learning outcomes by integrating visual, motor, and cognitive elements. Similar findings were presented by Azizah (2021), who emphasized that the use of the Jarimatika method does not burden memory and utilizes fingers as a readily available tool, making the learning process easier and more enjoyable.

Thus, based on the results of data analysis and theoretical studies, it can be concluded that the consistent and planned application of the Jarimatika method can improve students' mathematics learning outcomes in multiplication. This improvement is not only seen in the cognitive aspect (test scores), but also in the affective aspect (learning motivation) and psychomotor (the ability to use fingers in the calculation process). This proves that the

Jarimatika method is an effective, creative learning strategy, and in accordance with the characteristics of the cognitive development of Madrasah Ibtidaiyah students.

D. Conclusion

Based on the results of classroom action research that has been carried out in two cycles, it can be concluded that the application of the Jarimatika method has proven effective in improving students' mathematics learning outcomes in multiplication material in grade III of MI Nurul Mun'im. This is indicated by an increase in the average value of student learning outcomes from 58 in the pre-action to 74 in cycle I, and increased again to 89 in cycle II. The percentage of learning completeness also experienced a significant increase, namely from 29% in the initial conditions, to 59% in cycle I, and reaching 100% in cycle II.

These improvements demonstrate that the Jarimatika method can help students understand multiplication concepts in a concrete, enjoyable, and easy-to-apply way. Using fingers as a counting tool provides a learning experience that aligns with elementary school students' cognitive developmental stages, improving conceptual understanding as well as speed and accuracy in calculation. Furthermore, this method also positively impacts students' motivation, engagement, and confidence in mathematics learning.

Thus, it can be concluded that the Jarimatika method is an effective, creative, and appropriate learning alternative to be applied in mathematics learning at the Madrasah Ibtidaiyah level, especially to improve learning outcomes in the material on multiplication operations.

REFERENCES

Anisa, D., & Heryanto, A. (2024). Pengaruh Metode Jarimatika Terhadap Hasil Belajar Siswa Pada Pembelajaran Matematika di Kelas I SD Negeri 20 Pemulutan. *Journal Of Social Science Research*, *4*, 253–261.

Annisa, N., Jabri, U., & Rahmat, R. (2025). Analisis Hasil Belajar dalam Pembelajaran Matematika dengan Metode Jarimatika pada Siswa Kelas III di Madrasah Ibtidaiyah Muhammadiyah Buntu Barana. *Cokroaminoto Journal of Primary Education*, *8*(1), 1–11.

Authar, N., Rulyansah, A., Budiarti, R. P. N., Mardhotillah, R. R., & Azzahra, S. M. (2022). Pengaruh Metode Jarimatika terhadap Kemampuan Berhitung Siswa di SDN Jatiadi II Kecamatan Gending Kabupaten Probolinggo. *Indonesia Berdaya*, *4*(1), 181–192. https://doi.org/10.47679/ib.2023391

Fitra, K. R., Yuwono, A., Sutopo, Y., Avrilianda, D., Fitra, K. R., Yuwono, A., Sutopo, Y., Avrilianda, D., Subali, B., Semarang, U. N., Semarang, U. N., Semarang, U. N., Semarang, U. N., Semarang, U. N., & Jarimatika, M. (2025). *ISSN 2548-9119 Pendahuluan Pendidikan dipahami sebagai suatu bentuk upaya dalam mempersiapkan generasi penerus bangsa yang akan memberikan pengetahuan , keterampilan dalam menyelesaikan masalah melalui proses perkembangan . Pendidikan memiliki salah satu* . *9*(1), 112–118.

Hanifa, R., & Syehma Bahtiar, R. (2024). Upaya Meningkatkan Hasil Belajar Matematika Pada Materi Perkalian Dengan Metode Jarimatika Siswa Kelas Iv. *Pedagogik : Jurnal*

Pendidikan Guru Sekolah Dasar, *12*(1), 43–49. https://doi.org/10.33558/pedagogik.v12i1.8106

Hanik, E. U., Pratama, M. R., Khasanah, U., & Putri, H. C. (2021). Penggunaan Metode Jarimatika Dan Drill Untuk Meningkatkan Hasil Belajar Materi Operasi Perkalian Pada Siswa Kelas Iii Mi Nu Miftahut Tholibin Mejobo Kudus. *Jurnal Ilmiah Pendas: Primary Education Journal*, *2*(2), 111–117. https://doi.org/10.29303/pendas.v2i2.501

Himmah K, Makmur J, & Nuraini L. (2021). Efektivitas Metode Jarimatika dalam Meningkatkan Kemampuan Berhitung Perkalian Siswa. *Dawuh Guru: Jurnal Pendidikan MI/SD*, *Vol. 1 No. 1*(1), 57–67.

Indiastuti, T. (2021). Pengaruh Metode Jarimatika Perkalian Pada Pelajaran Matematika Terhadap Hasil Belajar MIN 1 Madiun. *ISEJ: Indonesian Science Education Journal*, *2*(3), 137–143.

Jumadiyah, N., & Zumrotun, E. (2024). Pengaruh Penggunaan Metode Jarimatika Terhadap Literasi Numerasi Melalui Program Kampus Mengajar Batch 5 di Sekolah Dasar. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *7*(1), 12–22. https://doi.org/10.54069/attadrib.v7i1.710

Nasrul Naufal, Siti Kurnia, Aulia Khairunnisa, Sadiah, L. H., Nurul Hidayati, Chelsi Ariati, Hanne Ayuningtias Elsa, & Suhendra. (2023). Pembelajaran Operasi Perkalian Menggunakan Metode Jarimatika dan Lidimatika. *Jurnal Pengabdian Kepada Masyarakat Indonesia (JPKMI)*, *3*(1), 47–54. https://doi.org/10.55606/jpkmi.v3i1.1218

Rahayu, M. F., Hasim, W., & Herniyanti, H. (2025). Pengaruh Metode Jarimatika Terhadap Hasil Belajar Perkalian Siswa Kelas III SD. *ALACRITY : Journal of Education*, *5*(1), 480–487. https://doi.org/10.52121/alacrity.v5i1.638

Sitio, T. (2017). Penerapan Metode Jarimatika Untuk Meningkatkan Hasil Belajar Matematika Siswa Kelas I Sdn 003 Pagaran Tapah Darussalam Kabupaten Rokan Hulu. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, *6*(1), 146. https://doi.org/10.33578/jpfkip.v6i1.4097

Suparni, S. (2018). Efektifitas Metode Jarimatika Dalam Pembelajaran Operasi Hitung Perkalian Bagi Anak Sekolah Dasar/ Madrasah Ibtidaiyah. *Logaritma: Jurnal Ilmu-Ilmu Pendidikan Dan Sains*, *6*(02), 45. https://doi.org/10.24952/logaritma.v6i02.1273

Yanti, H. D., & Nugroho, P. B. (2024). Pengaruh Penerapan Metode Jarimatika Terhadap Kemampuan Berhitung Penjumlahan Siswa Kelas II Sekolah Dasar Negeri Talang Jali. *Eksponen*, *14*(2). https://doi.org/10.47637/eksponen.v14i2.1154

Yudha, F. (2020). Penerapan Metode Jarimatika Materi Perkalian Pada Siswa Kelas 4 MI Hidayatul Mubtadiin Balak Songgon. *Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan*, *6*(1), 32–40.