



The Effect of the *Project Based Learning* Model Based on Local Wisdom Media on Learning Outcomes and Numeracy Skills of Elementary School Students

Triyatno¹, Rahayu Kariadinata², Anggy Giri Prawiyogi³

¹Universitas Terbuka

²Universitas Islam Negeri Sunan Gunung Djati Bandung

³Universitas Buana Perjuangan

Corresponding E-mail: 501172934@ecampus.ut.ac.id

ABSTRACT

This research is motivated by the low mathematics learning outcomes and numeracy skills of students at SDN 8 Talang Ubi, which is caused by the learning process that is still conventional and less contextual. The purpose of this study is to test and analyze the effectiveness of the PjBL model integrated with local wisdom media in the form of the traditional game of Snakes and Ladders in improving learning outcomes and numeracy skills of fifth grade students. The research method used is quantitative with a Quasi-Experimental design in the form of a Non-equivalent Control Group Design. The results showed that there was a significant influence of the application of the local wisdom-based PjBL model on learning outcomes and numeracy skills. The average post-test score of the experimental class' learning outcomes (89.26) was much higher than the control class (69.63), with an N-Gain Score effectiveness of 76.87% (effective category). In the numeracy ability variable, the experimental class achieved an average of 86.30 with an N-Gain Score of 80.31% (effective category). Qualitative data supports these findings by showing students' affective achievement in the "Very Good" category (87.41) and psychomotor in the "Very Skilled" category (87.78). The conclusion of this study is that the local wisdom-based PjBL model is effectively able to improve the learning outcomes and numeracy skills of elementary school students through more meaningful, interactive learning, and rooted in local culture.

© 2026 Kantor Jurnal dan Publikasi UPI

ARTICLE INFO

Article History:

Submitted/Received 02 Mar 2026

First Revised 20 Apr 2026

Accepted 15 Mei 2026

First Available online 01 Jun 2026

Publication Date 01 Jun 2026

Keyword

*Project Based Learning;
Local Wisdom;
Learning Outcomes;
Numeracy*

1. INTRODUCTION

Education plays a crucial role in building character and improving academic abilities. Basic education also holds a pivotal role in laying the foundation for students' cognitive, social, and emotional development. In this era of globalization and rapid technological advancement, challenges in the world of education are increasingly complex. Therefore, education should not only serve as a vessel for transferring knowledge in accordance with the demands of the times, but should also refer to educational development by integrating local wisdom values, so as to be closer to and more easily accepted by students.

One of the fundamental aspects that need to be addressed in basic education is students' numeracy skills. Numeracy, which encompasses the ability to understand, use, interpret, and communicate mathematical information in various contexts, is an important skill that underlies students' success across various subjects and in everyday life (OECD, 2019). However, the reality in the field shows problems related to low mathematics learning outcomes and numeracy skills among elementary school students. Various studies and observations in Indonesia indicate that many students still experience difficulties in understanding basic mathematical concepts, solving problems involving numbers, and applying numeracy skills in real-world contexts.

This is evident from the 2018 PISA (Programme for International Student Assessment) data, which ranked Indonesia 73rd out of 78 countries (Hewi & Shaleh, 2020). This condition is further exacerbated by the 2022 PISA results, which indicate a decline in the numeracy skills of Indonesian students. According to the OECD (2023), Indonesia's PISA score in the mathematics category dropped from 379 in 2018 to 366 in 2022. This 13-point decline in Indonesia's PISA score signals a learning crisis and a setback in the development of 21st-century skills in Indonesia, which must be addressed seriously as it has become an urgent need in today's globalization era. This outcome also contradicts the target score set in the 2024 National Medium-Term Development Plan (RPJMN), which aimed for a score of 388 for Indonesia's PISA ranking in the mathematics category. Meanwhile, at SDN 8 Talang Ubi, particularly in grade 5, 47% of students have mathematics learning outcomes below average. This condition is of serious concern because low mathematics learning outcomes and weak numeracy skills can hinder students' overall academic development and limit their participation in a society that increasingly relies on quantitative data and information.

One factor believed to contribute to this problem is the lack of relevance and connection between learning materials and students' experiences and environments. Abstract mathematics learning that is detached from the context of students' daily lives is often considered boring and difficult to understand. As a result, students' learning motivation declines and conceptual understanding becomes shallow.

One way to address this problem is by choosing an appropriate and engaging learning model. The right learning model can stimulate students' thinking that mathematics is not complicated or boring. In addition, creating a learning environment that encourages students to play an active role during the learning process is also very important. Project-Based Learning (PjBL) has been proven effective in creating a learning environment that encourages

students to play an active role during the learning process. This learning model enables students to learn through direct experience and apply mathematical concepts in real contexts (Panjaitan et al., 2023). The PjBL learning method is also a learning method that focuses on student activities in solving problems and applying their knowledge in real projects. However, the challenge for every educator is to make learning by integrating the PjBL model more relevant and engaging for students. Integrating local wisdom-based media, such as traditional games, into PjBL can be an effective solution (Amelia, 2025). In this context, local wisdom as the cultural wealth and traditional knowledge possessed by a community has great potential to be integrated into the learning process. Local wisdom needs to be integrated into elementary school learning because one of the characteristics of learning activities is flexibility, where teachers can connect subject matter with themes that exist in the living environment of students (Lawe et al., 2019).

Local wisdom is part of a community's culture that cannot be separated from the language of that community itself and is usually passed down from one generation to the next. Local wisdom is knowledge and practices that develop in local communities through experience and interaction with the surrounding environment, discovered through accumulated experience in experimentation and integrated with an understanding of the culture and natural conditions of a place (Una, 2024).

Local wisdom is the medium closest to children's lives, grounded in values. Character formation can be achieved because children are inspired and learn from value sources that grow in their environment (Prawiyogi, 2023). The use of local wisdom in education is believed to create more meaningful, contextual, and engaging learning for students (Banks & Banks, 2010). Students more easily understand a material studied through the culture around them (Kariadinata et al., 2023). Teachers have a primary role in introducing and applying local wisdom to students, one of which is through the use of learning media.

The integration of local wisdom into learning media, particularly in mathematics subjects, is expected to bridge the gap between abstract mathematical concepts and students' concrete experiences. Abstract mathematics learning requires teaching aids in the form of media or props that can clarify what the teacher intends to convey (Nugraheni, 2017). Through the use of examples, teaching aids, or learning activities based on the culture and environment of students, mathematical concepts can be presented in a more familiar and easily understood way. For example, traditional games to practice counting skills or the use of local agricultural products to understand the concepts of measurement and comparison. Thus, local wisdom media-based PjBL not only improves students' abilities in mathematics learning, but also enriches their knowledge and increases their sense of love for their own culture.

SDN 8 Talang Ubi, as one of the elementary schools in Penukal Abab Lematang Ilir Regency, South Sumatra Province, has diverse local wisdom potential. However, not many studies have specifically examined the use of local wisdom as a learning medium, particularly in relation to improving learning outcomes and numeracy skills of students at this school. Initial observations at SDN 8 Talang Ubi indicate problems similar to the national condition, namely students who still have difficulty understanding mathematical concepts and applying numeracy skills, as well as unsatisfactory mathematics learning outcomes.

2. RESEARCH METHODOLOGY

The method used in this study is mixed methods research. As stated by Creswell, mixed methods research is an approach in research that combines or connects quantitative and qualitative research methods (Sugiyono, 2014). Creswell also classifies mixed methods into two main models, namely the sequential model (sequential combination) and the concurrent model (mixed combination). The sequential model is a research procedure in which the researcher develops research results from one method to another in sequence at different times. Meanwhile, the concurrent mixed methods model is a research procedure in which the researcher combines quantitative and qualitative data by mixing them at the same time (Sugiyono, 2014). The concurrent mixed methods model consists of three designs: Concurrent Triangulation Design (balanced mixture of quantitative and qualitative), Concurrent Embedded Design (unbalanced mixture), and Concurrent Transformative Design (a combination of the triangulation and embedded models).

The research method used in this study is the unbalanced mixed method (concurrent embedded design). Sugiyono (2014) states that the unbalanced mixed method (concurrent embedded design) is a research method that combines the use of quantitative and qualitative research methods simultaneously or together, but with different methodological weights. In this method, there is a primary method and a secondary method. The primary method is used to obtain the main data, while the secondary method is used to obtain data to support the data obtained from the primary method.

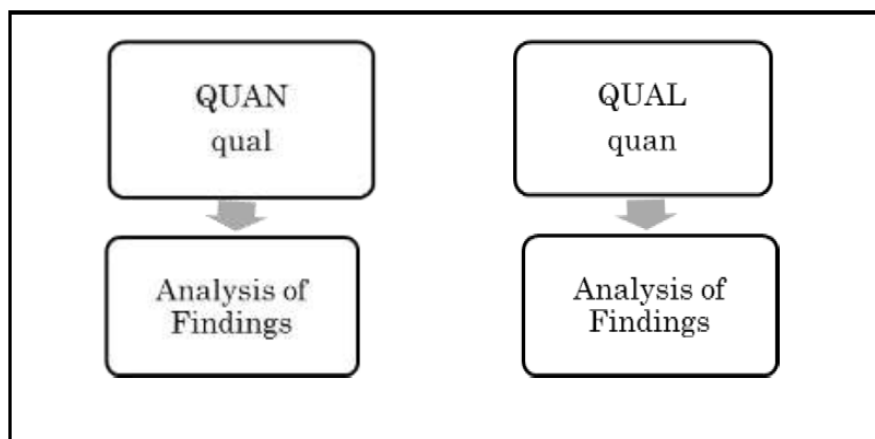


Figure 1. Unbalanced Mixed Model Research (Concurrent Embedded Design). Source: Sugiyono (2014)

Based on Figure 1 above, it can be seen that there are two models of method combination, with capital letters indicating that the method is the primary method, while lowercase letters indicate that the method is the secondary method. In the left model, the primary method (which has a higher weight) is quantitative. Meanwhile, in the right model, the primary method is the qualitative method.

In this study, the researcher uses the unbalanced mixed model (concurrent embedded design) with a quantitative approach as the primary method. The quantitative approach with the experimental method is used concurrently with the qualitative approach with the descriptive method. Since the primary method used is the quantitative method, the methodological weight is more focused on the experimental method.

3. RESULTS AND DISCUSSION

This study aims to examine the effect of using the Project Based Learning (PjBL) model based on local wisdom media on the cognitive learning outcomes and numeracy skills of grade V students at SDN 8 Talang Ubi. Based on the data analysis that has been carried out, the following is an in-depth discussion of the research results.

Based on the results of hypothesis testing using the Mann Whitney U test, a significance value (Asymp. Sig. 2-tailed) of 0.000 was obtained, which is less than 0.05. This indicates that there is a significant difference in learning outcomes between the experimental class using the local wisdom media-based PjBL model and the control class using the conventional model. This improvement in learning outcomes is also evident from the comparison of average post-test scores. The experimental class achieved an average of 89.26, far exceeding the control class which only reached 69.63. In addition, the effectiveness test through the N-Gain Score shows that the local wisdom media-based PjBL model in the experimental class has an average of 76.87%, which falls into the "Effective" category. In contrast, the control class only obtained an N-Gain of 17.88%, categorized as "Not Effective."

This effectiveness is attributable to the characteristics of the PjBL model that encourages students to be active in real projects, which in this study was modified through the traditional game of Snakes and Ladders as a local wisdom medium. The use of media that is close to the local culture helps students understand abstract mathematical concepts in a more concrete and relevant way to their daily lives.

Regarding numeracy skills, the data analysis results also show a significant positive effect. The Mann Whitney U test yielded a significance value of 0.000 (< 0.05), so the H_a hypothesis is accepted. This means there is a significant effect of implementing the local wisdom-based PjBL model on improving students' numeracy skills compared to the conventional method.

Descriptively, the average post-test score for numeracy skills in the experimental class was 86.30, while the control class only scored 62.96. The N-Gain Score test results for numeracy skills in the experimental class reached 80.31% (the "Effective" category), while the control class only reached 17.46% (the "Not Effective" category).

The integration of local wisdom in the PjBL model provides a strong context for students to apply number and mathematical concepts in practical situations. Numeracy skills are not merely about counting, but rather the ability to solve problems in real contexts. Through local wisdom-based projects, students feel more engaged and motivated, which ultimately impacts the deeper mastery of numeracy skills. This integrative interpretation was carried out by

combining the results of quantitative and qualitative analysis to provide a comprehensive picture of the effect of the local wisdom-based PjBL model on the research variables.

Quantitatively, the effectiveness of this model has been convincingly proven through statistical testing. The significance value of 0.000 for learning outcomes and numeracy skills indicates that the intervention provided a real impact and is not a statistical coincidence. This is reinforced by the N-Gain Score in the experimental class reaching the "Effective" category (76.87% for learning outcomes and 80.31% for numeracy), which far exceeds the control class. These figures serve as an objective foundation that the use of the Snakes and Ladders local wisdom medium within the PjBL framework significantly improves the academic performance of students at SDN 8 Talang Ubi.

Qualitative data from observations, interviews, and non-test instruments provide answers to the questions of how and why those statistical figures were achieved. Through data triangulation (observations, interviews, and documentation), it can be concluded that the local wisdom-based PjBL model creates a holistic learning ecosystem. The significant difference in learning outcomes and numeracy is not only due to the material, but due to the transformation of the students' roles:

1. Increased Motivation through the Affective Aspect

The high affective scores (average 87.41) explain why learning outcomes improved. Through interviews, it was found that students felt that learning mathematics became "not scary" because they used game media that is familiar to their culture. This sense of enjoyment triggered higher focus and enthusiasm.

2. Conceptual Internalization through the Psychomotor Aspect

Psychomotor assessment data categorized as "Very Skilled" (87.78) shows that students not only memorized formulas, but also practiced them. In the Snakes and Ladders project, students were physically involved in counting steps and solving problems on the game board, which helped them visualize the concepts of perimeter and area of flat shapes in a concrete way.

3. Numeracy Contextualization

Descriptive analysis of the interview results revealed that students' difficulties in numeracy have been caused by problems that are too abstract. The use of local wisdom media acts as a "cognitive bridge," in which students use mathematical logic to win the game, so that numeracy skills are formed naturally and meaningfully.

The integration of both data sets shows that the local wisdom-based PjBL model is not only statistically superior in improving test scores (cognitive), but also successfully changed students' learning behavior to be more active, collaborative, and skilled. The superiority of the experimental class over the control class is due to the students' emotional and practical engagement with the learning methods and media used. Thus, the Local Wisdom Media-Based PjBL Model has been proven as a powerful instrument in overcoming low learning outcomes and numeracy skills through a humanistic and contextual approach.

4. CONCLUSION

The application of the local wisdom-based PjBL model has been proven to significantly improve student learning outcomes compared to the conventional model. This was confirmed through the Mann Whitney U statistical test with a significance value of 0.000 (< 0.05). This superiority is reflected in the experimental class's average post-test with an effectiveness level (N-Gain) Effective Category, while the control class only reached Not Effective Category.

The local wisdom-based PjBL model had a significant positive effect on students' numeracy skills. Students in the experimental class were able to achieve an average numeracy Effective Category. The integration of local wisdom in the form of the Snakes and Ladders game helped students contextualize numbers and flat shape concepts into real situations, so that students' numerical logic skills increased drastically compared to the control class.

In addition to the cognitive aspect, this study also proves the existence of superior improvements in learning behavior. Qualitatively, students in the experimental class had an average affective score Very Good and a psychomotor score Very Skilled. This indicates that the use of media familiar to local culture is able to foster students' enthusiasm, responsibility, and technical skills in completing mathematics projects.

Comprehensively, the difference in results between the two groups is due to the student-centered nature of the PjBL model and the use of local wisdom media as a cognitive bridge. This media successfully reduced students' learning difficulties and anxiety toward mathematics, transforming the learning process into an enjoyable, interactive, and meaningful experience.

5. REFERENCES

- Adhim, M. R. F., & Prawiyogi, A. G. (2025). Sosialisasi Disiplin Dan Etika Pada Sdn Sukadami. *Abdima Jurnal Pengabdian Mahasiswa*, 4(1), 3408-3414.
- Ardi, S.D.K., dan Dessty, A. (2023). Media Pembelajaran Ular Tangga untuk Meningkatkan Motivasi Belajar Numerasi Siswa di Sekolah Dasar. *Buletin Pengembangan Perangkat Pembelajaran*, Vol 5, No 1, hal 1-9.
- Aryani, Nini, dan Mollie Wahyuni. (2021). *Belajar dan Pembelajaran Teori Beserta Implikasinya*. Yogyakarta: Bintang Pustaka Madani.
- Bandarsyah. D., Andi., & Suleman. (2023). Penguatan Kesadaran Budaya Berbasis Kearifan Lokal Melalui Pembelajaran Sejarah. *Chronologia*. Vol 5 (1): 16-27. <https://doi.org/10.22236/jhe.v5i1.11874>
- Banks, J. A., & Banks, C. A. M. G. (2010). *Multicultural Education: Issues and Perspectives*. Wiley. Retrieved from: <https://books.google.co.id/books?id=e1ITbOA2jhQC> accessed on
- Dimiyati & Mudjiono. (2015). *Belajar dan Pembelajaran*. Jakarta: PT. Rineka Cipta.

- D'Ambrosio, U., & Rosa, M. (2017). Ethnomathematics and its pedagogical action in mathematics education. In *Ethnomathematics and its diverse approaches for mathematics education* (pp. 285–305). Springer.
- Emda, Amna. (2018). Kedudukan Motivasi Belajar Siswa Dalam Pembelajaran. *Lantanida Journal* 5(2): 172.
- Emiyati, A & Kurniawan, A.H. (2022). *Media Pembelajaran*. Purbalingga : CV. Eureka Media Aksara.
- Gulo, W. (2010). *Metodologi Penelitian*. Jakarta: PT Gramedia Widiasarana Indonesia.
- Guslinda, & Kurnia, R. (2018). *Media Pembelajaran Anak Usia Dini*. Surabaya: Jakad Publishing.
- Hardani. (2020). *Metode Penelitian Kualitatif dan Kuantitatif*. Yogyakarta: CV. Pustaka Ilmu Group.
- Hasan, M., Milawati, Darodjat, Harahap, T.K., Tahrim, T., Anwari, A.M., Rahma, A., Masdiana, Indra, I.M. (2021). *Media Pembelajaran*. Jakarta: Tahta Media Group .
- Hasanah, L., & Nurhasanah, A. (2020). Kemampuan Membaca Permulaan Melalui Penggunaan Media Papan Flanel Anak Usia 4-5 Tahun. *Jurnal PAUD AGAPEDIA*, 2 (1), 12-22. <https://doi.org/10.17509/jpa.v2i1.24384>
- Herliani, Boleng, D., Maasawet, E.T. (2022). *Teori Belajar dan Pembelajaran*. Klaten: Lakeisha.
- Hewi, L., & Shaleh, M. (2020). Refleksi Hasil PISA (The Programme For International Student Assesment): Upaya Perbaikan Bertumpu Pada Pendidikan Anak Usia Dini. *Jurnal Golden Age*, 4(01), 30–41. <https://doi.org/10.29408/jga.v4i01.2018>
- Humairo, V. M., & Amelia, Z. (2021). Peningkatan Kemampuan Berhitung Awal Melalui Modifikasi Bentuk Permainan Congklak. *Jurnal Anak Usia Dini Holistik Integratif (AUDHI)*, 3(1), 19-30.
- Kariadinata, R., Milah, A.M., & Sugilar, H. (2023). Development of Interactive Augmented Reality Multimedia Based on Ethnomatematics. *Jurnal Analisa*, 9 (1), 22-36.
- Kemdikbud. (2014). Materi pelatihan guru implementasi kurikulum 2013 tahun ajaran 2014/2015: Mata pelajaran IPA SMP/MTs. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Kemendikbud. (2021). *Panduan Literasi & Numerisasi di Sekolah*. Jakarta: Direktorat Jenderal Pendidikan Anak Usia Dini, Pendidikan Dasar, dan Pendidikan Menengah Kementerian Pendidikan dan Kebudayaan. https://repositori.kemdikbud.go.id/22599/1/Panduan_Penguatan_Literasi_dan_Numerisasi_di_Sekolah_bf1426239f.pdf

- Khomariah, N., Zawawi, I., & Suryanti, S. (2022). Analisis Kemampuan Literasi Numerasi Peserta Didik Ditinjau Dari Pola Pikir Matematis. *AKSIOMA: Jurnal Matematika Dan Pendidikan Matematika*, 13.
- Latifah, L.N., Ibda, H., Al-Hakim, M.F. (2023). Pengaruh Media Pembelajaran Bahan Tayang Berbasis Kearifan Lokal Temanggung Terhadap Hasil Belajar Matematika. *Edutrained: Jurnal Pendidikan dan Pelatihan*. Vol 7, No 1.
- Laksana, D. N., Kurniawan, P. A., Niftalia, I. (2018). Pengembangan Bahan Ajar Tematik SD Kelas IV Berbasis Kearifan Lokal Masyarakat Ngada. *Jurnal Ilmiah Pendidikan Citra Bakti*. 3 1 pp. 1–10.
- Lawe. Y. U., Dopo. T., & Kaka. P. W. 2019. Pengembangan Bahan Ajar Elektronik Berbasis Budaya Lokal Ngada Untuk Pembelajaran Tematik Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*. Vol. 6 (2): 134-145. <http://jurnalilmiahcitrabakti.ac.id/jil/index.php/jil>.
- Lestari, Endang Titik. (2020). *Cara Praktis Meningkatkan Motivasi Siswa Sekolah Dasar*. Yogyakarta: CV Budi Utama.
- Maghfiroh, S., & Suryana, D. (2021). Media Pembelajaran untuk Anak Usia Dini di Pendidikan Anak Usia Dini. *Jurnal Pendidikan Tambusai*, 1560–1566.
- Maharani, A.S., Nasuha, S.U., & Maulida, S.R. (2024). Media Pembelajaran Sebagai Alternatif Meningkatkan Gairah Belajar. *Journal BIONatural*. Vol 11 (1), pp. 76-83.
- Mulyadi. (2010). *Evaluasi Pendidikan Pengembangan Model Evaluasi Pendidikan Agama Di Sekolah*. UIN-Maliki Press
- Maemanah, S., & Saleh, H. (2022). Analisis Kemampuan Numerasi Dan Motivasi Diri Mahasiswa Calon Guru Matematika. *Seminar & Conference Proceedings of 1*, 37–45. <http://103.131.16.137/index.php/cpu/article/view/6851>
- Nurhayati, N., Asrin, A., & Dewi, N. K. (2022). Analisis Kemampuan Numerasi Siswa Kelas Tinggi dalam Penyelesaian Soal Pada Materi Geometri di SDN 1 Teniga. *Jurnal Ilmiah Profesi Pendidikan*, 7(2b), 723–731. <https://doi.org/10.29303/jipp.v7i2b.678>
- Nurjanah, M., Dewi, D. T., Al Fathan, K. M., & Mawardini, I. D. (2022). Literasi Numerasi Dalam Pembelajaran Tematik. *Muallimuna : Jurnal Madrasah Ibtidaiyah*, 7(2), 87.
- Nurmi, Safei, & Rusydi Rasyid, M. (2023). Pengaruh Penggunaan Media Papan Flanel Terhadap Kemampuan Membaca Permulaan Peserta Didik Kelas I SDN Mawang. *Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah*, 5(1), 56–61.

- Nugraheni, N. (2017). Implementasi permainan pada pembelajaran Matematika di sekolah dasar. *Journal of Medives: Journal of Mathematics Education IKIP Veteran Semarang*, 1(2), 142-149.
- Prawiyogi, A. G. (2018). Kajian Tujuh Poe Atikan Pendidikan Purwakarta Istimewa Dalam Peraturan Bupati Nomor 69 Tahun 2015. *MADROSATUNA: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 1(1), 62-72.
- Prawiyogi, A. G., & Suparman, T. (2024). Meningkatkan Kesadaran Anak dalam Menerapkan Pola Hidup Sehat untuk Mencegah Virus Covid-19. *Sivitas: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 4(2), 63-66.
- Prawiyogi, A. G. (2025). Mempelajari Macam-Macam Norma Yang Berlaku Di Masyarakat. *ABDIMA JURNAL PENGABDIAN MAHASISWA*, 4(1), 3378-3385.
- Rahim, B. (2020). *Media Pendidikan*. Depok : PT Rajagrafindo Persada.
- Rahmawati, S.T., Wijayama, B., Rahmayanti, N. dan Utami, C.P.C. (2023). *Media Pembelajaran Matematika di Sekolah Dasar Era Digital*. Semarang: Penerbit Cahya Ghani Recovery.
- Resti, Y., Zulkarnain, Z., Astuti, A., & Kresnawati, E. S. (2020). Peningkatan Kemampuan Numerasi Melalui Pelatihan dalam Bentuk Tes untuk Asesmen Kompetensi Minimum Bagi Guru SDIT Auladi Sebrang Ulu II Palembang. *Applicable Innovation of Engineering and Science Research (AVoER)*, 670-673.
- Suarningsih. N. M. 2019. Peranan Pendidikan Berbasis Kearifan Lokal dalam Pembelajaran di Cetta. *Jurnal Ilmu Pendidikan*. Vol 2 (1): 23-30. <http://ejournal.jayapanguspress.org/index.php/cetta>
- Sugiyono. (2014). *Metode Penelitian Pendidikan*. Bandung: CV. Alfabeta.
- Sumayana. Y. 2017. Pembelajaran Sastra Di Sekolah Dasar Berbasis Kearifan Lokal (Cerita Rakyat). *Mimbar Sekolah Dasar*. Vol 4(1):21-28. DOI:10.53400/mimbar-sd.v4i1.5050
- Susilawati. I., Jannah. A. W., Pebrianti. A. R., Shodikoh. A. F., & Magdalena. I. 2021. Pentingnya Media Pembelajaran Untuk Meningkatkan Minat Belajar Siswasdn Meruya Selatan 06 Pagi. *EDISI : Jurnal Edukasi dan Sains*, Vol 3 (2): 312-325. <https://ejournal.stitpn.ac.id/index.php/edisi>
- Una, L.M.W., Beku, V.Y., Nono, U., Lawe, Y.U., Dhiu, L.M. (2024). Penerapan Media Pembelajaran Berbasis Kearifan Lokal Terhadap Kemampuan Numerasi Siswa Kelas IV SDI Rutosoro. *POLINOMIAL: Jurnal Pendidikan Matematika*, Vol. 3 No. 2 November 2024, hal 53-65.
- Winnuly, Hikmawati L., Sari, A.W.M. (2024). Pembelajaran Numerasi Berbasis Potensi Lokal Pada Anak Usia Dini. *Arsen: Jurnal Penelitian Pendidikan*, Vol. 1 No. 2.

Wulandari, Isna, Jody Hendrian, Indri Puspita Sari, Felinda Arumningtyas, Rina Br Siahaan, and Hasbi Yasin. "Efektivitas Permainan Kartu sebagai Media Pembelajaran Matematika." *E-Dimas: Jurnal Pengabdian kepada Masyarakat* 11, no. 2 (June 29, 2020): 127–31. <https://doi.org/10.26877/e-dimas.v11i2.2513>.