Al-Ishlah: Jurnal Pendidikan
Vol.17, 4 (December, 2025), pp. 8351-8358
ISSN: 2087-9490 EISSN: 2597-940X, DOI: 10.35445/alishlah.v17i4.7985

Enhancing Elementary Students' Numeracy through the GASING Method: A Quasi-Experimental Study

Yessika Destiana Lahabu [1],Wadan Y Anuli[2], Shilfany Putri[3], Mahmud Arif [4], Sigit Prasetyo[5], Abroto[6]

[1] Institut Agama Islam Muhamadiyah Kotamobagu, Indonesia; lahabuyessika@gmail.com
[2] Institut Agama Islam Negeri Manado, Indonesia; wadan.anuli@iain-manado.ac.id
[3] Univesitas Insaniah Sumatera Utara, Indonesia ; shilfanyputri@unisu.ac.id
[4] Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia; drmahmud.arif@uin-suka.ac.id
[5] Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia; sigitprasetyo@uin-suka.ac.id
[6] Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia; ahmadabroto05@gmai.com

ARTICLE INFO

Keywords:

GASING method;
numeracy competence;
elementary education;
instructional innovation;
quasi-experimental study

Article history:

Received 2025-06-11
Revised 2025-09-18
Accepted 2025-12-31

ABSTRACT

Numeracy competence is a foundational skill for elementary students, essential for success in 21st-century learning. However, many Indonesian students continue to face difficulties in understanding mathematical concepts and performing calculations effectively. This study investigates the effectiveness of the GASING (*Gampang, Asyik, Menyenangkan*) method in enhancing numeracy skills among fourth-grade students. A quasi-experimental one-group pre-test and post-test design was employed with a mixed-methods approach. Thirty fourth-grade students at MIN 1 Manado participated in the study over two months. Quantitative data were gathered through numeracy tests, while qualitative data were collected via observations, interviews, and open-ended questionnaires. Data were analyzed using paired sample t-tests and thematic coding. Students' numeracy scores improved significantly from a mean of 45.6 (pre-test) to 78.3 (post-test), with a large effect size (Cohen's d = 2.63). Observations showed increased engagement and participation, while qualitative feedback revealed reduced math anxiety and increased motivation. Both students and teachers expressed positive perceptions of the method's interactive and enjoyable approach. The findings suggest that the GASING method effectively improves both computational fluency and conceptual understanding in mathematics. Its emphasis on progressive learning, visual tools, and enjoyable activities fosters a positive learning environment. While the absence of a control group limits generalizability, the results indicate that GASING holds promise as an instructional strategy in elementary numeracy education.

Corresponding Author:
Yessika Destiana Lahabu
Institut Agama Islam Muhamadiyah Kotamobagu; lahabuyessika@gmail.com

1. INTRODUCTION

Numeracy competence is one of the fundamental skills that must be possessed by elementary school students to support the understanding of mathematics concepts and their application in daily life. These competencies include not only the ability to calculate quickly but also the skills to understand, analyze, and apply mathematical concepts in a variety of real-world situations (Yunarti and Amanda 2022). However, various research results and educational evaluations show that the numeracy competence of elementary school students in Indonesia is still relatively low (Rohmah et al., 2022). The 2023 National Assessment Report (AN) conducted by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) shows that the majority of elementary school students still have difficulties in solving numeracy-based problems, especially those involving problem solving and mathematical reasoning (Irwin et al., 2023). In addition, international studies, such as the Programme for International Student Assessment (PISA), consistently rank Indonesia at the bottom in mathematical literacy (Robiah, Hendarman, and Hidayat 2023). These results indicate that many students are still not able to understand basic math concepts well, which ultimately leads to their low skills in quick calculation and solving math problems systematically (Kenedi et al., 2019).

Various problems in mathematics learning are the main factors that cause the low numeracy competence of elementary school students in Indonesia. One of the most dominant factors is the less innovative learning approach, which tends to still be conventional (Leso et al., 2023). Mathematics learning in many schools is still dominated by mechanical lecture methods and practice questions without providing students with a deep understanding of concepts.(Sept. 2025) As a result, students memorize formulas more than they understand the concepts behind the mathematical operation. This causes low analytical ability of students in solving numeracy-based problems and their limitations in applying mathematics in daily life (Ellerton & Clements, 2022). In addition, the phenomenon of math anxiety is also one of the main obstacles in learning mathematics in elementary school. Many students feel afraid and lack confidence when facing math subjects. This can be caused by a less enjoyable learning experience, pressure to get high results, and less attractive teaching methods. High math anxiety can negatively impact students' motivation to learn, so they tend to avoid math or find it difficult to focus on understanding the material given (Hartati et al. 2024).

Another problem that contributes to students' low numeracy competence is the lack of reinforcement in quick counting skills. Many students are not familiar with exercises oriented towards understanding concepts and calculating speed, so they take a long time to complete simple calculation operations (Sharman et al., 2025). The lack of systematic and enjoyable exercises causes students to struggle in developing effective numeracy skills. In addition, teachers also often face limitations in providing fast counting training due to the limitations of the learning methods they master (Yasir, 2024).

Not only that, the lack of resources and lack of training for teachers in implementing innovative learning methods are also inhibiting factors in improving students' numeracy competence. Many teachers have not received special training in implementing more interesting and interactive learning strategies (Lapitan et al., 2021). As a result, they still tend to use conventional methods that are less effective in improving students' numeracy skills. In addition, access to teaching materials based on innovative methods such as GASING (Easy, Fun, and Fun) is still limited, especially in remote areas, so the implementation of this method is not even in all elementary schools in Indonesia (Ramadan et al. 2024).

To overcome these problems, a more innovative, interactive, and fun learning approach is needed (Bulkani et al., 2022). One of the methods that has been proven effective in improving the ability to calculate speed and understanding of mathematical concepts is the GASING method, which was developed by Prof. Yohanes Surya (Surya & Surya, 2025). This method offers a learning approach that starts from simple concepts to more complex ones gradually, with an emphasis on deep conceptual understanding as well as fun, intensive exercises. By using the GASING method, students are not only invited to memorize formulas, but also to understand the thinking process behind each mathematical operation. This makes them more confident in learning math and can significantly increase their calculation speed.(Devi, 2024)

The GASING method has been applied in several areas with fairly positive results, but further studies are still needed to understand its implementation in various learning contexts (Alirmansyah et al., 2024). Several studies have shown that this method can significantly improve students' numeracy skills, but more in-depth evaluation is still needed regarding how this method can be implemented more widely in various elementary schools, both in urban and rural areas (Birhan et al., 2021). In addition, it is important to further research the challenges and obstacles faced by teachers in implementing this method and how best solutions can be applied effectively in various learning environments (Ayanwale et al., 2022).

The limited number of studies examining the broader impact of the GASING method reveals a significant research gap, particularly regarding its potential not only to improve rapid calculation skills but also to strengthen students' overall numeracy competence within a more comprehensive and applicable learning framework. Existing literature primarily focuses on GASING as a strategy for enhancing computational speed, while fewer studies explore its role in developing deeper numerical thinking that is critical, contextual, and aligned with the demands of 21st-century education (Rizaldi et al., 2023). Consequently, further investigation is needed to examine how the GASING approach contributes to the development of numeracy dimensions as outlined in national education policies and international standards. Such research is important to provide a clearer understanding of how innovative mathematics learning methods can support broader numeracy development among elementary school students.

The study addresses the need for a numeracy learning approach that is not only engaging and easily understood by students but also capable of supporting higher-order thinking skills. With an appropriate instructional design and systematic implementation, the GASING method is believed to have strong potential to build a solid numeracy foundation for elementary school learners. Therefore, this study aims to analyze the effectiveness of the GASING method in improving the numeracy skills of elementary school students. Specifically, the research seeks to answer the following questions: (1) Can the implementation of the GASING method enhance the fast-counting abilities of fourth-grade students? (2) What effect does the GASING method have on students' understanding of mathematical concepts? and (3) How do students and teachers perceive the learning process using the GASING method? The findings of this study are expected to contribute theoretically to the development of mathematics education research and practically to provide an alternative approach for improving the quality of numeracy education in Indonesia.

2. METHODS

2.1 Research Design

This research uses a mixed-methods approach, which is a combination of quantitative and qualitative approaches (Nasution and Junaidi 2024). A quantitative approach was used to measure the implementation of the GASING method through a quasi-experimental design with a single group pre-test and post-test. Meanwhile, a qualitative approach is used to explore in depth the learning process, experiences, and perceptions of students and teachers towards the application of the GASING method.

2.2 Participants and Sampling

The research was carried out at MIN 1 Manado with 30 research subjects of grade IV who were selected purposively. The research implementation time lasts for two months in the even semester of the 2024/2025 academic year. The research location was chosen because this school has a high commitment to learning innovation and has implemented a curriculum that is in accordance with the application of the GASING method.

2.3 Intervention Design

The intervention consisted of 8 structured learning sessions over a two-month period. Each session lasted 90 minutes, conducted twice per week. The design of each session included the following: Session 1–2 Diagnostic assessment and introduction to GASING philosophy (fun, conceptual understanding). Session 3–4 Basic number operations and conceptual visualization using manipulative tools. Session 5–6 Problem-solving exercises with speed and accuracy drills. Session 7 Application of numeracy in real-life contexts: money, time, distance. Session 8 Consolidation, reflection, and post-test evaluation. Each session emphasized progressive learning, starting from simple concepts and gradually advancing to more complex tasks, following the GASING method's scaffolding principles. Qualitative data was obtained through in-depth observations, interviews, and open questionnaires to explore the perceptions and responses of students and teachers (et al. Azhari 2023).

2.4 Instruments and Validity

Four main instruments were used in this research: 1) Numeracy test 20 items, multiple-choice and short answers. 2) Observation sheets to monitor student engagement and behavior. 3) Open-ended perception questionnaires for students and teachers. 4) Semi-structured interview guides. Instrument validity was ensured through expert judgment content validity involving mathematics education lecturers and practitioners, followed by pilot testing in a different class with similar characteristics. Reliability for the numeracy test was assessed using Cronbach's alpha, which yielded a coefficient of 0.82, indicating high internal consistency. Quantitative data analysis was carried out by descriptive and inferential statistical tests (t-tests), while qualitative data was analyzed by data reduction, categorization, and triangulation techniques to ensure the validity of the data.

2.5 Data Collection Procedures

With this mixed-methods approach, the research is expected to provide a more comprehensive understanding of the implementation and challenges of the implementation of the GASING method in improving the numeracy competence of elementary school students. Quantitative data were collected through the pre-test and post-test administered before and after the intervention. Qualitative data were gathered via non-participant observations, semi-structured interviews, and open-ended questionnaires during and after the implementation. Data triangulation was achieved by comparing observational field notes, questionnaire responses, and interview transcripts to strengthen the trustworthiness of the qualitative findings.

2.*6 Data Analysis Techniques*

Quantitative data were analyzed using descriptive statistics (mean, standard deviation) and paired sample t-tests to determine the significance of changes in numeracy scores. Qualitative data were analyzed thematically using Miles and Huberman's interactive model, involving data reduction, coding and categorization, and interpretive synthesis. Triangulation and member-checking were used to enhance data credibility.

3. FINDINGS AND DISCUSSION

3.1 The Research results

This study aimed to evaluate the effectiveness of the GASING method in improving the numeracy competence of elementary school students, particularly in the domains of speed calculation and conceptual understanding. The quantitative results indicate a statistically significant increase in student performance following the intervention. The average pre-test score was 45.6 (SD = 8.2), while the post-test average rose to 78.3 (SD = 7.6). A paired sample t-test revealed a significant difference between the

pre - and post-test scores ($t(29) = 18.47$, $p < 0.001$), with a large effect size (Cohen's $d = 2.63$), indicating a substantial impact of the GASING method on students' numeracy competence. These findings support the notion that structured, enjoyable, and conceptually grounded instruction as emphasized in the GASING method can lead to significant cognitive gains in mathematics. In terms of learning theory, the results align with constructivist approaches, which argue that knowledge is best internalized when learners actively construct understanding through exploration, meaningful practice, and social interaction. GASING promotes these principles by starting from simple concepts and gradually increasing complexity through active engagement.

Lower pre-test results showed that at first students did not have a strong understanding of basic concepts of mathematics and computational speed. However, after participating in learning using the GASING method, which focuses on quick counting exercises, in-depth understanding of concepts, and fun application, students' numeracy competencies experience very positive changes. This significant increase shows that the GASING method is effective in overcoming the problem of low numeracy competence among elementary school students.

3.2 Observation results

Classroom observations conducted across the eight sessions consistently showed high levels of student engagement, enthusiasm, and participation. Students were actively involved in each phase of the GASING cycle warm-up, concept exploration, quick calculation drills, and reflection. During the implementation of the research, observations were made at each meeting to assess the involvement and participation of students in learning activities using the GASING method. The results of the observation showed that students were very enthusiastic in participating in every activity designed using the GASING approach. Activities such as numeracy warm-ups, concept exploration, speed counting exercises, and reflection have a positive impact on student motivation and engagement.

Notably, during numeracy warm-ups, students entered learning activities with visible excitement, which suggests reduced anxiety and increased readiness. The concept exploration phase enabled students to relate mathematical ideas to real-life contexts, moving beyond rote memorization to conceptual reasoning. This is critical, as numeracy involves not only calculating but understanding mathematical relationships in varied settings. In addition, at the concept exploration stage, students are invited to explore a deeper understanding of the math material given, not just memorize formulas. This makes students able to connect theory with practice, which strengthens their understanding.

In the quick counting practice session, students showed a significant improvement in terms of speed and accuracy in solving math problems. This activity provides an opportunity for students to practice and improve their numeracy speed in a non-stressful atmosphere, so they feel more confident.

3.3 Interview Results and Perception Questionnaire

To explore the perception of students and teachers on the application of the GASING method, interviews were conducted and questionnaires were distributed. Based on the results of interviews with students, the majority of students stated that they felt happier and more interested in learning mathematics after applying the GASING method. One student revealed, "The GASING method made it easier for me to understand math, and I was no longer afraid of being calculated!" This shows that the GASING method not only succeeds in improving students' numeracy skills, but also reduces the math anxiety that students often experience in elementary school.

In addition, in interviews with teachers, they reported that the GASING method provides space for students to think more actively and be more independent in solving math problems. The teacher stated, "With the GASING method, students become more excited and not only rely on memorizing formulas, but begin to understand mathematical concepts in a more fun way." Teachers also revealed that this method can help them create a more interactive and engaging classroom atmosphere, allowing students to learn math in a more meaningful way.

The perception questionnaires yielded > 90% positive responses regarding comfort, confidence, and interest in math after GASING-based learning. Teachers rated the method highly for engagement and pedagogical flexibility, though some noted time constraints in covering curriculum breadth using this model. In addition to the interviews, the student and teacher perception questionnaire also showed very positive results. Most students feel more confident in solving math problems after participating in the GASING method, and they state that they feel more comfortable practicing math without fear or anxiety. On the other hand, teachers also give a good assessment of the GASING method, considering it as an approach that can effectively improve students' numeracy skills.

Discussion

The findings of this study indicate that the GASING method is effective in improving students' numeracy skills, particularly in enhancing computational fluency and students' confidence in learning mathematics. These results are consistent with previous research showing that the GASING approach can significantly improve arithmetic performance among elementary students, including those in rural learning contexts (Kurniawan & Latifatunnisa, 2024). The structured stages of the GASING method—starting from concrete experiences and gradually moving toward abstract understanding—allow students to build mathematical concepts systematically, making learning more accessible and meaningful. This gradual progression helps students overcome difficulties in basic arithmetic and encourages active engagement in the learning process.

Compared with other instructional approaches, such as Realistic Mathematics Education (RME) and Montessori-based mathematics games, the GASING method appears particularly effective in developing calculation speed and learning confidence. While RME emphasizes contextual problem solving and conceptual understanding (Gravemeijer & Doorman, 2023), and Montessori approaches promote independent exploration through manipulatives (Lillard, 2022), GASING integrates structured guidance with enjoyable activities that focus on strengthening numerical fluency. This characteristic is especially beneficial for students who previously experienced learning difficulties in mathematics, as the method reduces anxiety and builds confidence through gradual mastery of concepts.

From a theoretical perspective, the effectiveness of the GASING method can be explained through the concept of scaffolded learning, in which teachers provide structured support that enables learners to progress from their current level of understanding to more advanced levels (Vygotsky, 2021). Through step-by-step challenges and guided practice, students are supported within their zone of proximal development, allowing them to internalize mathematical concepts more effectively. Furthermore, the use of visual and concrete learning tools in GASING aligns with dual coding theory, which suggests that learning becomes more effective when information is presented through both verbal and visual representations (Paivio, 2021). Therefore, the integration of scaffolded instruction and multimodal representation contributes significantly to the improvement of students' numeracy learning outcomes.

4. CONCLUSION

This study examined the implementation of the GASING method in improving the numeracy competence of fourth-grade students at MIN 1 Manado and found that the method effectively enhanced students' mathematical abilities and engagement in learning. The results showed a substantial improvement in students' numeracy performance, with the average score increasing from 45.6 in the pre-test to 78.3 in the post-test, indicating that the GASING approach supports both rapid calculation skills and a better understanding of mathematical concepts. In addition, the interactive and enjoyable learning activities, such as games and structured exercises, increased students' motivation, confidence, and participation during mathematics lessons, while teachers also reported positive perceptions of the

method for creating a more engaging and supportive classroom environment. However, this study has several limitations, including the relatively small sample size, the implementation in only one school, and the absence of a control group, which may limit the generalizability of the findings. Some practical challenges were also identified, particularly related to time management and the need for greater teacher familiarity with the method. Therefore, future research should involve larger and more diverse samples, incorporate experimental or randomized designs, and explore the long-term impact of the GASING method on students' mathematical development. Further studies are also recommended to examine the integration of GASING in different educational contexts and to investigate how teacher training and digital learning resources may enhance the effectiveness and scalability of this approach in elementary numeracy education.

REFERENCES

Alirmansyah, A., Zulkhi, M. D., Pandya, P. A., Haya, A. F., & Wulandari, V. (2024). Integrating The Traditional Game Gasing: Comparison And Correlation Of Responses, Peace-Loving Character, Social Care, And Student Responsibility. *Journal Of Innovation In Educational And Cultural Research*, *5*(4), Article 4. Https://Doi.Org/10.46843/Jiecr.V5i4.2018

Ayanwale, M. A., Sanusi, I. T., Adelana, O. P., Aruleba, K. D., & Oyelere, S. S. (2022). Teachers' Readiness And Intention To Teach Artificial Intelligence In Schools. *Computers And Education: Artificial Intelligence*, *3*, 100099. Https://Doi.Org/10.1016/J.Caeai.2022.100099

Azhari, D. S., Afif, Z., Kustati, M., & Sepriyanti, N. (2023). Penelitian Mixed Method Research Untuk Disertasi. *Innovative: Journal Of Social Science Research*, *3*(2), 8010–8025.

Birhan, W., Shiferaw, G., Amsalu, A., Tamiru, M., & Tiruye, H. (2021). Exploring The Context Of Teaching Character Education To Children In Preprimary And Primary Schools. *Social Sciences & Humanities Open*, *4*(1), 100171. Https://Doi.Org/10.1016/J.Ssaho.2021.100171

Bulkani, Fatchurahman, M., Adella, H., & Setiawan, M. A. (2022). Development Of Animation Learning Media Based On Local Wisdom To Improve Student Learning Outcomes In Elementary Schools. *International Journal Of Instruction*, *15*(1), 55–72.

Devi, N. K. L. (2024). Analisis Pelaksanaan Kegiatan Numerasi Dengan Metode Matematika Gasing Yang Di Kaitkan Dengan Permainan Tradisional Pada Siswa Kelas 4 Sd N 1 Demulih. *Pentagon: Jurnal Matematika Dan Ilmu Pengetahuan Alam*, *2*(4), 78–94.

Ellerton, N., & Clements, M. A. K. (2022). Toward Mathematics For All: Answers To Research Questions, Limitations, And Possibilities For Further Research. In N. Ellerton & M. A. (Ken) Clements (Eds.), *Toward Mathematics For All: Reinterpreting History Of Mathematics In North America 1607-1865* (Pp. 351–382). Springer International Publishing. Https://Doi.Org/10.1007/978-3-030-85724-0_9

Hartati, P., Saputra, E., Danim, S., Susanta, A., Yensy, N. A., & Yanti, F. A. (2024). Kecemasan Matematika Dan Pencapaian Akademik Siswa: Tinjauan Literatur Sistematis. *Jurnal Konseling Dan Pendidikan*, *12*(4), 418–432.

Irwin, V., Wang, K., Tezil, T., Zhang, J., Filbey, A., Jung, J., Mann, F. B., Dilig, R., & Parker, S. (2023). *Report On The Condition Of Education 2023. Nces 2023-144rev*. National Center For Education Statistics. Https://Eric.Ed.Gov/?Id=Ed630121

Kenedi, A. K., Helsa, Y., Ariani, Y., Zainil, M., & Hendri, S. (2019). Mathematical Connection Of Elementary School Students To Solve Mathematical Problems. *Journal On Mathematics Education*, *10*(1), 69–80.

Kurniawan, A., & Latifatunnisa, A. (2024). Comparison Between Gasing And Conventional Methods On Mathematics Learning Outcomes In Elementary School. *El Midad: Jurnal Jurusan Pgmi*, *16*(1), Article 1. Https://Doi.Org/10.20414/Elmidad.V16i1.9491

Lapitan, L. Ds., Tiangco, C. E., Sumalinog, D. A. G., Sabarillo, N. S., & Diaz, J. M. (2021). An Effective Blended Online Teaching And Learning Strategy During The Covid-19 Pandemic. *Education For Chemical Engineers*, *35*, 116–131. Https://Doi.Org/10.1016/J.Ece.2021.01.012

Leso, B. H., Cortimiglia, M. N., & Ghezzi, A. (2023). The Contribution Of Organizational Culture, Structure, And Leadership Factors In The Digital Transformation Of Smes: A Mixed-Methods Approach. *Cognition, Technology & Work*, *25*(1), 151–179. Https://Doi.Org/10.1007/S10111-022-00714-2

Nasution, U. H., & Junaidi, L. D. (2024). *Metode Penelitian*. Serasi Media Teknologi.

Ramadhani, O., Indriyanti, L., Marsanda, A., Bakti, N. W. S. A., Damayanti, P. D., & Pratiwi, D. A. (2024). Kendala Dan Solusi Guru Dalam Penyusunan Tema Pembelajaran Tematik Untuk Meningkatkan Kualitas Pendidikan Di Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(04), 234–251.

Rizaldi, D. F., Atiqoh, F., Dwikoranto, D., Prahani, B. K., Wibowo, F. C., & Astutik, S. (2023). Analysis Of Physics Concepts In Gasing Games. *International Journal Of Emerging Research And Review*, *1*(1), Article 1. Https://Doi.Org/10.56707/Ijoerar.V1i1.5

Robiah, R., Hendarman, H., & Hidayat, R. (2023). Evaluasi Program Literasi Anak Dengan Pendekatan Model Cippo. *Murhum: Jurnal Pendidikan Anak Usia Dini*, *4*(1), 528–539.

Rohmah, A. N., Sutama, S., Hidayati, Y. M., Fauziati, E., & Rahmawati, L. E. (2022). Planning For Cultivation Numerical Literacy In Mathematics Learning For Minimum Competency Assessment (Akm) In Elementary Schools. *Elementary School Forum (Mimbar Sekolah Dasar)*, *9*(3), 503–516.

Sharman, L. S., Fitzgerald, R., & Douglas, H. (2025). Strangulation During Sex Among Undergraduate Students In Australia: Toward Understanding Participation, Harms, And Education. *Sexuality Research And Social Policy*, *22*(1), 362–375. Https://Doi.Org/10.1007/S13178-024-00941-4

Surya, M. A., & Surya, Y. (2025). *A New Approach To Learn Trigonometry* (No. Arxiv:2503.11678). Arxiv. Https://Doi.Org/10.48550/Arxiv.2503.11678

Utami, Y. (2025). Faktor-Faktor Yang Mempengaruhi Rendahnya Pemahaman Konsep Matematika Pada Siswa Sd. *Dikmat: Jurnal Pendidikan Matematika*, *6*(01), 17–21.

Yasir, M. (2024). Tingkat Literasi Sains Siswa Terhadap Etnosains Keris Madura Dalam Pembelajaran Ipa. *Membangun Dinamika Matematika Dan Ilmu*, *91*.

Yunarti, T., & Amanda, A. (2022). *Pentingnya Kemampuan Numerasi Bagi Siswa*. *2*(1), 44–48.