



Analysis Of Numeration Literacy Program Implementation In Low Class Learning

Muhammad Misbahudholam AR^{1*}, Zainuddin², Kurratul Aini³, Tuti Mutia⁴

^{1,2,3} STKIP PGRI Sumenep, Indonesia

⁴ Universitas Negeri Malang, Indonesia

* Corresponding Author. E-mail: misbahudholam@stkipgrisumenep.ac.id

Receive: 27/08/2022

Accepted: 10/09/2022

Published: 01/10/2022

Abstract

This study aims to describe (1) the implementation of numeracy literacy implementation of low-grade students of SDN Batuan I, (2) constraints on the implementation of numeracy literacy of low-grade students of SDN Batuan I, (3) efforts made to overcome obstacles in the implementation of the numeracy literacy program at SDN Batuan I. This research is a qualitative research with a case study approach. Data collection was carried out by observation, interviews and documentation as primary data and some secondary data in the form of references used. The results showed that (1) the application of the numeracy literacy program in low-grade learning at SDN Batuan I was running well and effectively. This is evidenced by the existence of reading and memorizing formulas in the form of singing, there is a reading corner and a reading garden, there is a literacy tree, and there is a school library; (2) obstacles in the implementation of numeracy literacy for low-grade students of SDN Batuan I, namely differences in the background and role of parents, book eligibility, and motivation levels for literacy program targets; (3) efforts made to minimize obstacles during the implementation of the numeracy literacy program, namely communication renewal, strategies to increase interest in reading that are appropriately adapted to student conditions and improving the quality of literacy program targets through training organized by schools.

Keywords: Numeracy Literacy Program, Learning, Low Class

Introduction

The National Literacy Movement (GLN) was started in 2016 by the Indonesian Ministry of Education and Culture, and this movement aims to improve literacy culture in Indonesia, which is still relatively low (Hardiansyah, 2022a). The School Literacy Movement Program (GLS) as an effort to produce academic students who can instil good manners through reading books outside of textbooks within 15 minutes before learning begins (Ekowati et al., 2019). Meanwhile, the ability to read is the initial foundation for developing other literacy, such as in mathematics, which is taught at every level of education (Hardiansyah & AR, 2022), known as

numeracy literacy; in science, it is known as scientific literacy, as well as some literacy in other subjects (Hardiansyah et al., 2022).

Numerical literacy is a person's reasoning ability in various activities to manipulate mathematical symbols that exist in everyday life, either orally or in writing. Meanwhile, numeracy can be interpreted as recognising, reading, writing, and applying numbers and arithmetic operations in life (Aini & Ridwan, 2021). However, numeracy literacy problems in schools are still common. This is due to the low awareness among school members regarding the benefits of literacy and numeracy (Afandi et al., 2021). Apart from that, the problem often

encountered is minimal reading books in schools. This, of course, will lead to a lack of ability of school members in literacy skills (Misbahudholam, 2016).

PISA (Program for International Student Assessment) research shows that in 2009, out of 65 countries, Indonesia was ranked 57th. In 2012, out of 65 countries, Indonesia was ranked 64th, and in 2015, out of 70 countries, Indonesia was ranked 64th, which shows the ability to read and students' Mathematics and Science capabilities are still relatively low (Wiratsiwi, 2020). Therefore, this research focuses on implementing the numeracy literacy program at the elementary school level. Various things can be done to familiarize literacy and numeracy in elementary schools, including providing a stimulus to students to stimulate their curiosity (Perdana & Suswandari, 2021). However, in general, schools still need to implement literacy and numeracy programs, but class teachers have made modifications to learning (Hardiansyah & Zainuddin, 2022). This also impacts the cultivation of numeracy literacy in lower grades, where the characteristics of low-grade students differ from those of upper-grade students. Teachers must seek ways to familiarize students with numeracy literacy, starting with low-grade students (Hardiansyah, n.d.).

Several schools have implemented an independent curriculum by focusing on students' numeracy literacy, one of which is SDN Batuan I. SDN Batuan I is an elementary school in Sumenep Regency that implements the School Literacy Movement (GLS). The results of observations and interviews conducted on April 23 2022, with the Principal, class II teachers and class II students show that the implementation of numeracy literacy in learning in low grades has gone well. Some of the obstacles encountered have been carried out at the effort stage to minimize the inhibiting factors for implementing numeracy literacy. Therefore, this research is focused on implementing literacy programs in schools, the obstacles encountered in implementing these programs, and the efforts that schools have made to overcome these obstacles. This research needs to be done because literacy and numeracy skills are required to improve academic abilities. This is expected to form

human beings who can respond to global challenges (AR & Hardiansyah, 2021).

Method

This research was conducted at SDN Batuan I, which focused on grade II students because grade II students were low-grade students who had passed grade I and were about to enter grade III, so researchers could check the development of students' numeracy literacy who had been accustomed to starting grade I. Considerations for choosing location research is because in the preliminary study, the school stated that it had implemented the School Literacy Movement, but several obstacles and improvement efforts had been made, so further research was needed. This descriptive qualitative research describes, analyses and clarifies an incident at a particular time (Zainuddin et al., 2021). The approach used in this study is a case study to investigate and understand the problems that arise at SDN Batuan I to get solutions to these problems. Data were collected through observation, interviews and documentation as primary data and some secondary data in the form of references used in this journal. The interviews in this study used unstructured interviews; namely, the researcher prepared points or core questions according to the problems to be studied and developed them during the interview. The interviews focused on school principals, class II teachers, and students at SDN Batuan I. The observation stage, or observation, was carried out and was used to determine the implementation process, constraints, and efforts that had been made directly. Meanwhile, the documentation stage collected documents and photographs related to the numeracy literacy program at SDN Batuan I, Sumenep City.

Result and Discussion

Implementation of Numerical Literacy in Class II of SDN Batuan I

According to interviews with the Principal, class II teachers and class II students, information was obtained that School Literacy Activities (GLS) has been carried out since 2016 at SDN Batuan I. These activities were a form of improving students' reading quality. Then, in

2020 the school will participate in a workshop on implementing numeracy literacy programmed by the local government by appointing low-grade teachers as the primary target subjects. After the workshop activities, literacy activities were initially integrated into the Indonesian language subject, while the numeracy activities were integrated into the mathematics subject. This shows that SDN Batuan I already has insight into the School Literacy Movement (GLS) program. The following is information on implementing the School Literacy Movement (GLS) at SDN Batuan I.

Reading activities at school are at the habituation stage; reading activities are already entrenched at SDN Batuan I, where these activities are carried out for 15 minutes in the form of reading aloud. This is in line with Wendri Wiratsiwi's statement that there are three stages of implementing the Literacy Movement, including the habituation stage, the development stage, and the habituation or learning stage (Wulandari & Azka, 2018). Before learning begins, students enter the classroom and are given time to read prayers together and sing national songs. After that, students were told to read a book they liked for 15 minutes, after which the teacher asked one of the students to demonstrate what they had read in front of the class every day in turn or by writing notes in a book about what they had read. This aims to build self-confidence in students and sharpen their memory. After reading or literacy activities are completed, the teacher also provides numeracy activities, namely singing while memorizing mathematical formulas. Teachers creatively and innovatively provide math material that they have to memorize in the form of songs that are easy for students to remember. These activities are carried out every day at SDN Batuan I.

Based on the results of interviews with the Principal and class teacher, information was obtained that the obstacles experienced during the implementation of numeracy literacy at the Batuan I Elementary School included: During the implementation of literacy and numeracy, there were several obstacles, namely the lack of communication between teachers and parents who find it challenging to study subjects that are

integrated with numeracy literacy activities. For example, math subjects use techniques to count from left to right, which sometimes makes parents feel difficult to help their children with school assignments. In line with this program, it also depends on the role of parents who have complete responsibility for the child's development and growth (AR & Hardiansyah, 2022) in participating in the success of the Numeracy Literacy Movement. The role of parents is essential in the educational process (Aini & Yasid, 2022). Lack of participation from parents will be one of the obstacles to implementing the numeracy literacy program (Dafit & Ramadan, 2020), such as a lack of reading books at home.

In line with the statement made by the principal, who stated that the difference in how to calculate between students and their parents or guardians is one of the obstacles. As well as the lack of support from parents to support children's interests and talents in literacy and numeracy activities. In addition, the eligibility of books and the level of student motivation are also important factors that schools must pay attention to. According to the results of interviews conducted with grade II teachers, several books supporting numeracy literacy are no longer suitable for use. Then, not a few students feel bored or bored in carrying out habituation activities, which are repeated daily. It is common for students' interest in reading to decrease daily, so it needs to be overcome with practical efforts. In line with the statement from the class II teacher, students also conveyed that the books used to support numeracy literacy were no longer suitable for use. Thus, students feel bored or bored in carrying out habituation activities repeated every day. Therefore, it is necessary to encourage and motivate students to continue cultivating literacy and numeracy activities (Hardiansyah, 2022b).

Efforts to overcome the obstacles of the Numeracy Literacy Program in Schools

In essence, the school made several efforts to reduce the obstacles encountered while implementing numeracy literacy activities. Based on the results of interviews and observations, there are efforts by schools to overcome obstacles to implementing the numeracy literacy program, including; Developments in technology and

information to provide broad opportunities in education (Aini et al., 2020), so to anticipate miscommunication between parents or guardians of students and school programs, a WhatsApp group is formed in each class consisting of parents and class teachers as the person in charge. Thus, when parents find it challenging to provide material understanding to their children, the group can be a means for communicating and learning together. In addition to updating communication through forming groups in online applications, of course, it is necessary to check the enthusiasm of the parents of students in the group by one of the ways the homeroom teacher greets the guardians in the group regularly to find out the obstacles or problems parents have with children's development. It is also effective to pay attention to the level of enthusiasm of student parents in the programs implemented at school.

As explained above, the parents' role is needed to achieve the school program. The teacher's role is also very influential in increasing students' interest in reading and minimizing boredom (Faozi et al., 2020). Based on the results of interviews with the class II teacher at SDN Batuan I, it was emphasized that students are free to choose what books they want to read and when they will read them, not only in the 15 minutes of pre-learning. This is also supported by a carpeted facility in the reading corner that students can use as a seat mat when they want to read. In addition, to improve student's reading skills, the teacher also gives assignments in the form of reading textbooks. The school also seeks to fulfil reading books and library facilities so that students feel comfortable and get proper facilities. In order to improve the quality of the numeracy literacy program, the school collaborates with other schools that also implement this program. In line with the class II teacher's statement, it is essential to build communication between fellow teachers both at the school and with other school teachers to add new insights about new programs and efforts that can be made. Several teachers often carry out sharing activities; this shows that teachers should constantly update information about school activities such as the numeracy literacy program.

Conclusion

Numerical literacy in elementary school student learning can be done by providing stimulus to students. Based on information from the school principal and class II teachers, the research results note that school numeracy literacy at SDN Batuan I has been carried out since 2016 and has undergone several quality improvement processes to minimize existing constraints. The results showed that the implementation of numeracy literacy at SDN Batuan I was carried out by getting students used to constantly reading books they liked and asking students to sing while memorizing mathematical formulas. The school supports this activity by singing and reading, building reading gardens and reading corners, building literacy trees, and providing good books in the library.

References

- Afandi, F., Jafar, M. I., & K, A. (2021). Hubungan Kemampuan Literasi Numerasi dengan Hasil Belajar Matematika Siswa Kelas V SD Gugus II. *JIKAP PGSD: Jurnal Ilmiah Ilmu Kependidikan*, 5(3), 423–430.
- Aini, K., Hobri, Prihandoko, A. C., Yuniar, D., Faozi, A. K. A., & Asmoni. (2020). The Students' Mathematical Communication Skill On Caring Community-Based Learning Cycle 5E. *Journal of Physics: Conference Series*, 1538(1). <https://doi.org/10.1088/1742-6596/1538/1/012075>
- Aini, K., & Ridwan, M. (2021). Students' higher order thinking skills through integrating learning cycle 5e management with islamic values in elementary school. *Al-tanzim: Jurnal Manajemen Pendidikan Islam*, 5(3), 142–156.
- Aini, K., & Yasid, A. (2022). Kemampuan Berpikir Tingkat Tinggi Mahasiswa melalui Hybrid Learning. *Jurnal Basicedu*, 6(5), 7775–7781. <https://doi.org/10.31004/basicedu.v6i5.3589>
- AR, M. M., & Hardiansyah, F. (2021). Bentuk Penyajian Dan Nilai Filosofi Tari Muwang Sangkal Sumenep Untuk Anak Kelas VI Di sekolah Dasar. *Edumaspul: Jurnal Pendidikan*, 5(1), 759–767.

- AR, M. M., & Hardiansyah, F. (2022). Analisis Optimalisasi Peran Guru dan Orang Tua dalam Mendampingi Anak Selama Pembelajaran Daring Siswa Sekolah Dasar. *Jurnal Basicedu*, 6(1), 423–432.
- Dafit, F., & Ramadan, Z. H. (2020). Pelaksanaan Program Gerakan Literasi Sekolah (GLS) di Sekolah Dasar. *Jurnal Basicedu*, 4(4), 1429–1437.
<https://doi.org/10.31004/basicedu.v4i4.585>
- Ekowati, D. W., Astuti, Y. P., Utami, I. W. P., Mukhlisina, I., & Suwandayani, B. I. (2019). Literasi Numerasi di SD Muhammadiyah. *ELSE (Elementary School Educatio Journal)*, 3(1), 93–103.
- Faozi, A. K. A., Hobri, Fatekurohman, M., Aini, K., & Yuniar, D. (2020). Student's problem solving abilities in Project Based Learning (PjBL) based on Learning Community (LC). *Journal of Physics: Conference Series*, 1538(1). <https://doi.org/10.1088/1742-6596/1538/1/012070>
- Hardiansyah, F. (n.d.). *The Implementation of School-Based Management in Improving Quality of Education in Primary School*.
- Hardiansyah, F. (2022a). Snowball Throwing: A Method To Uplift Elementary School Students' Responsibility on Environment. *AL-ISHLAH: Jurnal Pendidikan*, 14(3), 3853–3864.
<https://doi.org/10.35445/alishlah.v14i3.1966>
- Hardiansyah, F. (2022b). The implementation of tolerance character education through social science learning in elementary school. *Auladuna: Jurnal Pendidikan Dasar Islam*, 9(2), 168–180.
- Hardiansyah, F., & AR, M. M. (2022). Enhancing Students' Learning Motivation through Changing Seats in Primary School. *Mimbar Sekolah Dasar; Vol 9, No 1 (2022)*.
<https://doi.org/10.53400/mimbar-sd.v9i1.43002>
- Hardiansyah, F., Misbahudholam AR, M., & Hidayatillah, Y. (2022). Development Of IPAS Learning Assessment To Measure Science Process Skill In Elementary School. *International Journal of Elementary Education*, 6(4 SE-Artikel).
<https://ejournal.undiksha.ac.id/index.php/IJE/article/view/54217>
- Hardiansyah, F., & Zainuddin, Z. (2022). The Influence of Principal's Motivation, Communication, and Parental Participation on Elementary School Teachers' Performance. *Al Ibtida: Jurnal Pendidikan Guru MI*, 9(2), 319–334.
- Misbahudholam, M. (2016). Implementasi Pendidikan Multikultural Melalui Pendekatan Nilai Luhur Budaya Dan Pancasila Untuk Membangun Karakter Mahasiswa Dalam Meghadapi Arus Globalisasi. *Jurnal Teori Dan Praksis Pembelajaran IPS*, 1(2), 89–101.
<https://doi.org/10.17977/um022v1i22016p089>
- Perdana, R., & Suswandari, M. (2021). Literasi Numerasi Dalam Pembelajaran Tematik Siswa Kelas Atas Sekolah Dasar. *Absis: Mathematics Education Journal*, 3(1), 9.
<https://doi.org/10.32585/absis.v3i1.1385>
- Wiratsiwi, W. (2020). Penerapan Gerakan Literasi Sekolah Di Sekolah Dasar. *Refleksi Edukatika: Jurnal Ilmiah Kependidikan*, 10(2), 230–238.
<https://doi.org/10.24176/re.v10i2.4663>
- Wulandari, E., & Azka, R. (2018). Menyambut Pisa 2018: Pengembangan Literasi Matematika Untuk Mendukung Kecakapan Abad 21. *De Fermat: Jurnal Pendidikan Matematika*, 1(1), 31–38.
<https://doi.org/10.36277/deferemat.v1i1.14>
- Zainuddin, Z., AR, M. M., Hidayat, F., & Fadhilah, A. (2021). Penguatan Komunikasi Orang Tua Dan Guru Terhadap Perkembangan Belajar Siswa Sekolah Dasar. *Prosiding SNAPP*, 119–122.