E-ISSN 3048-1554 Vol. 3, Issue 1 (2025)
Doi: https://doi.org/10.37899/mjdl.v3i1.307

Mauve Journal De Leardu

Implementation of the Literacy and Numeracy Habituation Program to Improve Students' Basic Competencies at Elementary School 1 Labuhan Haji

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Article Info

Article History:
Received: 10 November 2025
Revised: 12 January 2026
Accepted: 27 January 2026

Keywords:
Implementation
Literacy
Numeracy
Basic Competence
Elementary School

Abstract

This research aims to describe the implementation of literacy and numeracy programs in improving the basic competencies of students at SD Negeri 1 Labuhan Haji. The research approach used is qualitative descriptive, focusing on the implementation of activities, teachers' strategies, and the results seen in students' basic abilities. Data collection techniques were carried out through observations, interviews with classroom teachers, and documentation of literacy and numeracy activities conducted at the school every Tuesday. The results showed that the Literacy and Numeracy Habituation Activity (Bias Litnum) at SD Negeri 1 Labuhan Haji was implemented regularly and systematically. This activity consists of shared reading, writing simple responses, and numeracy exercises based on everyday life contexts. Teachers play an active role in designing interesting activities that are appropriate to the students' level of ability. The Bias Litnum program has been proven to improve students' reading comprehension, logical thinking, and basic arithmetic skills. Support from the principal, teachers, and parents also strengthens the culture of literacy and numeracy within the school environment.

INTRODUCTION

Basic education constitutes a critical phase in the development of human capital, as it establishes the foundational competencies required for lifelong learning and active participation in society. Among these competencies, literacy and numeracy are widely recognized as essential skills that underpin students' academic achievement, cognitive development, and social functioning. Literacy extends beyond the mechanical ability to read and write, encompassing the capacity to comprehend, interpret, evaluate, and communicate information effectively in diverse contexts (OECD, 2018). Similarly, numeracy refers not only to basic arithmetic proficiency but also to the ability to apply mathematical reasoning and numerical concepts to solve problems encountered in everyday life (UNESCO, 2017; Sujatha & Vinayakan, 2023; Megawati & Sutarto, 2021; Díez-Palomar et al., 2023). In the context of the

twenty-first century, these competencies are increasingly viewed as indispensable for navigating complex information environments, fostering critical thinking, and supporting informed decision-making (Asrifan et al., 2025; Chaliha et al., 2024; Panda & Kaur, 2024).

The importance of literacy and numeracy has been consistently emphasized in global educational discourse and empirical research. International large-scale assessments such as the Programme for International Student Assessment (PISA) and the Progress in International Reading Literacy Study (PIRLS) highlight strong associations between early mastery of these competencies and students' long-term academic trajectories (Mullis et al., 2017; OECD, 2019). Students who develop robust literacy and numeracy skills at the primary level are more likely to succeed across subject areas, demonstrate higher-order thinking skills, and exhibit greater learning independence (Abidin et al., 2020). Conversely, insufficient mastery of these foundational competencies can constrain students' ability to access knowledge, impede conceptual understanding, and widen educational inequalities from an early age. As a result, strengthening literacy and numeracy at the elementary school level has become a strategic priority for many education systems worldwide (Hapsarini et al., 2023; Sthapak et al., 2024; Nasrullah et al., 2024).

Despite sustained policy attention, evidence indicates that literacy and numeracy outcomes among elementary school students in Indonesia remain a significant concern. National assessment data reveal that a substantial proportion of students have not yet achieved minimum proficiency levels in reading comprehension and basic mathematics (Ministry of Education and Culture, 2020). These findings are corroborated by international comparisons, which consistently position Indonesian students below the global average in reading and mathematical literacy (OECD, 2019; IEA, 2022). Such outcomes suggest systemic challenges related to instructional practices, learning environments, and students' exposure to meaningful literacy and numeracy activities. If left unaddressed, these challenges risk undermining students' academic progression and limiting the effectiveness of subsequent educational interventions at higher levels (Fletcher & Vaughn, 2009; Halabieh et al., 2022).

In response to these persistent challenges, education policymakers have increasingly emphasized the need for holistic and sustainable approaches that move beyond conventional classroom instruction. In Indonesia, the Ministry of Education, Culture, Research, and Technology has introduced policy initiatives such as the School Literacy Movement and the strengthening of numeracy within the Merdeka Belajar framework. These initiatives promote the cultivation of literacy and numeracy habits through routine, contextual, and student-centered activities integrated into daily school life (Kemendikbudristek, 2021). The underlying premise of these policies is that consistent exposure to meaningful literacy and numeracy experiences can foster positive learning habits, enhance motivation, and gradually improve students' core competencies.

Prior research suggests that habituation-based programs represent a promising strategy for improving literacy and numeracy outcomes at the primary level. Habituation refers to the systematic and repeated engagement of students in literacy and numeracy practices that are embedded in authentic contexts and aligned with their developmental levels. Studies have shown that regular reading activities, reflective writing, and contextual numeracy exercises can strengthen comprehension, reinforce conceptual understanding, and support the transfer of skills to real-life situations (Pratiwi, 2021). Moreover, when such programs are designed to be engaging and relevant, they can reduce students' anxiety toward learning and encourage active participation, particularly among those who initially struggle with basic skills.

The effectiveness of literacy and numeracy habituation programs is closely linked to the role of teachers as facilitators and instructional designers. Teachers are required to select appropriate materials, differentiate tasks according to students' abilities, and create supportive learning environments that encourage exploration and reflection (Fitria & Kurniawan, 2022; Tomlinson, 2017; Cash, 2017). Empirical studies indicate that teachers who employ varied instructional strategies, utilize visual and contextual learning media, and integrate discussion and reflection into literacy and numeracy activities are more successful in promoting students' engagement and skill development. Collaboration with external actors, such as teaching assistants or university students involved in school-based programs, has also been shown to introduce instructional innovation and enrich classroom practices.

METHODS

is consistent with qualitative research standards, as it enables researchers to examine artifacts that reflect authentic educational practices and outcomes (Bowen, 2009).

The data analysis process followed a descriptive qualitative analysis framework consisting of data collection, data reduction, data display, and conclusion drawing. Initially, all data obtained from observations, interviews, and documentation were compiled and organized systematically. During data reduction, irrelevant or repetitive information was filtered out, while meaningful units related to program implementation, teacher strategies, and student outcomes were identified and coded. The reduced data were then organized into thematic categories to facilitate interpretation and pattern recognition. This iterative process allowed the researcher to move back and forth between data and emerging themes, ensuring that interpretations remained grounded in empirical evidence (Miles et al., 2014; Morgan & Nica, 2020; Snodgrass et al., 2020; Carcary, 2011; Gasson, 2004).

To enhance the trustworthiness of the study, several strategies were employed, including data triangulation, prolonged engagement in the research setting, and careful documentation of the research process. Triangulation across data sources and participant perspectives helped to confirm the consistency of findings and reduce potential bias. Prolonged engagement through repeated observations enabled a deeper understanding of routine practices and minimized the influence of atypical events. These strategies are widely recommended in qualitative research to strengthen credibility, dependability, and confirmability (Lincoln & Guba, 1985).

Ethical considerations were carefully addressed throughout the research process. Permission to conduct the study was obtained from the school administration, and participants were informed about the purpose of the research and their voluntary involvement. Confidentiality was maintained by anonymizing participant identities in all research records and reports. The study adhered to ethical principles of respect, beneficence, and integrity, ensuring that the research process did not disrupt learning activities or disadvantage any participants. By adhering to these ethical standards, the study aimed to produce findings that are both academically rigorous and socially responsible.

Overall, this methodology provided a systematic and rigorous framework for examining the implementation of the literacy and numeracy habituation program at SD Negeri 1 Labuhan Haji. By integrating multiple data sources and grounding the analysis in established qualitative research principles, the study offers a comprehensive understanding of how habituation-based literacy and numeracy practices function in an elementary school context and how they contribute to the development of students' basic competencies.

RESULTS AND DISCUSSION

Implementation of the Literacy and Numeracy Habituation Program (Bias Litnum)

The findings of this study indicate that the Literacy and Numeracy Habituation Program, locally known as Bias Litnum, has been implemented in a structured and consistent manner at SD Negeri 1 Labuhan Haji. Classroom observations revealed that the program is conducted routinely every Tuesday before the commencement of formal lessons, reflecting the school's commitment to embedding literacy and numeracy practices into daily learning routines. The activities are designed as non-formal learning sessions intended to create a relaxed yet purposeful atmosphere that encourages students' engagement. This implementation approach aligns with the principles of habituation-based learning, which emphasize consistency, repetition, and contextual relevance as key mechanisms for strengthening foundational competencies (Pratiwi, 2021). Interview data with classroom teachers provide detailed insights into how the Bias Litnum program is implemented and sustained in daily school practice. Teachers consistently emphasized that the program was intentionally designed as a routine activity rather than an additional academic burden. One teacher explained that the weekly schedule was chosen to ensure consistency and to help students internalize literacy and numeracy as habitual practices, stating that the activity was meant to make students,

> *"Accustomed to reading and counting without feeling pressured by formal lessons."*

This statement reflects the school's strategic emphasis on habituation, which prioritizes regular exposure and gradual skill development over short-term performance outcomes, as suggested in the literature on foundational learning (Pratiwi, 2021).

Teachers also reported that careful planning preceded each session to ensure alignment with students' developmental levels. According to interview responses, teachers deliberately selected short texts and simple numeracy problems that were familiar to students' daily experiences. One teacher noted that reading materials were chosen,

> *"Not to test students, but to invite them to understand stories that feel close to their lives,"*

Highlighting an instructional focus on comprehension rather than mechanical decoding. This approach is consistent with OECD (2018), which emphasizes that meaningful literacy instruction should foster understanding and interpretation rather than rote reading skills. Teachers further indicated that this strategy helped students feel more confident and willing to participate, particularly those who initially showed low motivation toward reading activities.

Regarding student engagement, teachers observed a gradual but noticeable increase in enthusiasm and participation over time. Interview data revealed that students began to anticipate the Bias Litnum sessions and often asked in advance about the reading materials or activities that would be used. One teacher stated that students,

> *"Look forward to Tuesdays because they know the activities are different and more relaxed,"*

Suggesting that the non-formal atmosphere played a significant role in encouraging engagement. This finding reinforces the notion that a supportive and low-pressure learning environment is essential for cultivating positive learning habits in literacy and numeracy (World Bank, 2019).

In relation to numeracy activities, teachers emphasized the importance of contextualization as a core implementation principle. Interviewees explained that abstract numerical drills were intentionally avoided, as they often discouraged students with lower mathematical confidence. Instead, numeracy tasks were embedded in real-life situations such as shopping, counting household items, or sharing objects among peers. One teacher remarked that students

> *"Understand numbers more easily when they can imagine using them in real situations,"*

The results show that contextual learning helped the students to have a deeper understanding of mathematical concepts. This view is in line with those of UNESCO (2017) who states that developing numeracy works best when mathematical reasoning is linked to real-world situations.

Teachers also stressed that interaction and discussion were the inseparable parts of the implementation process. The interview data indicated that the students were advised to present their rationalizations, exchange answers with other students, and talk over various solution methods in numeracy tasks. Students were observed by one of the teachers to know each other through their explanations, which not only proved to be more effective in the learning process, but also encouraged teamwork and communication proficiency. This observation indicates that the carry out Bias Litnum was not merely a skill practice as an individual, but it involved social learning that allowed undertaking of deeper cognitive processes. In short, the outcomes of the interview indicate an excellent alignment of the planned goals of the Bias Litnum program with the classroom practice. The stories of teachers indicate the implementation of the program based on a thoughtful design, regular practices, and purposeful activities with a student interaction and understanding in the first place. Such insights of interviews are in line with the results of observation and documentation, as the adoption of Bias Litnum represents the habituation-based approach, which proves to be effective to facilitate the growth of the literacy and numeracy competencies in students.

Teacher Strategies in Facilitating Literacy and Numeracy Activities

The results further highlight the central role of teachers in shaping the effectiveness of the Bias Litnum program. Interview data reveal that teachers perceive themselves not merely as instructors but as facilitators who guide students through literacy and numeracy experiences tailored to their abilities. Teachers reported deliberately adjusting the complexity of reading materials and numeracy tasks to accommodate diverse student competencies within the classroom. Classroom observations confirmed that teachers provide differentiated support, such as additional explanations or guided practice, to students who experience difficulties. Interview data reveal that teachers consciously position themselves as facilitators who support students' learning processes rather than as sole transmitters of knowledge. Teachers emphasized that their primary role in the Bias Litnum program is to guide, motivate, and adapt instruction according to students' diverse abilities. One teacher explained that facilitation requires continuous observation of students' responses, noting that

> *"Teachers must be sensitive to students' reactions, because each child responds differently to reading and numeracy activities."*

This statement indicates that teachers view instructional flexibility as a central strategy for sustaining engagement and ensuring that learning objectives are met. Such perceptions are consistent with facilitative teaching approaches highlighted in literacy and numeracy research, which stress responsiveness to learners' needs (Fitria & Kurniawan, 2022).

Teachers reported that differentiation is a key strategy employed during both literacy and numeracy sessions. Interviewees described deliberately adjusting the difficulty level of texts and numerical tasks to match students' competencies. One teacher noted that when students struggle with reading, she provides additional guidance by reading together or explaining vocabulary in simpler terms, while students with higher proficiency are encouraged to explore the text independently. This adaptive practice was also observed during classroom sessions, where teachers provided individual support without disrupting the overall flow of activities. These findings suggest that teachers actively balance inclusivity and challenge, which is essential for effective literacy and numeracy instruction at the elementary level.

The use of instructional media emerged as another prominent strategy highlighted in the interviews. Teachers consistently reported relying on visual aids, picture books, and simple manipulatives to enhance comprehension and sustain attention. One teacher stated that

> *"Pictures help students understand stories faster, especially those who still have difficulty reading,"*

Underscoring the role of visual support in bridging gaps in literacy proficiency. This approach aligns with prior research indicating that multimodal instruction can significantly enhance students' engagement and comprehension in early literacy learning (OECD, 2018). Teachers further indicated that storytelling techniques, such as asking predictive questions or relating stories to students' experiences, are frequently used to make reading activities more meaningful.

Post-reading discussion was identified as a critical facilitation strategy for strengthening students' comprehension and expressive skills. Teachers reported that they intentionally encourage students to verbalize their understanding before asking them to write responses. One teacher explained that asking students to explain ideas orally "helps them organize their thoughts before writing," which reduces anxiety and improves the quality of written work. Interview data suggest that this strategy also enables teachers to assess students' understanding in real time and provide immediate feedback. This practice reflects pedagogical recommendations emphasizing oral language development as a foundation for literacy learning (Mullis et al., 2017).

In numeracy sessions, teachers described adopting a guided problem-solving approach that prioritizes reasoning over correct answers. Interviewees emphasized that students are encouraged to explain how they arrive at solutions, even if their answers are initially incorrect. One teacher remarked that

> *"The most important thing is not the answer, but how students think about the problem,"*

Highlighting an instructional focus on logical reasoning. This strategy was observed during classroom activities where teachers prompted students to describe counting strategies or explain number patterns. Such practices are consistent with UNESCO's (2017) assertion that numeracy education should foster reasoning and communication rather than procedural memorization.

Teachers also acknowledged the contribution of teaching assistant students from the Kampus Mengajar program in enriching facilitation strategies. According to interview data, collaboration with teaching assistants allowed teachers to implement more varied instructional approaches, including educational games and interactive worksheets. One teacher stated that the presence of teaching assistants

> *"Made it easier to give attention to students who needed extra help,"*

Suggesting that collaborative facilitation enhanced instructional effectiveness. These findings support existing literature indicating that collaborative teaching can improve learning environments and promote innovation in classroom practices (Abidin et al., 2020). Overall, the interview findings demonstrate that teachers' facilitation strategies in the Bias Litnum program are characterized by adaptability, creativity, and a strong focus on student-centered learning. Teachers' narratives reveal that effective facilitation involves continuous adjustment, the strategic use of media, and the encouragement of reasoning and interaction. These strategies contribute to a learning environment that supports the development of literacy and numeracy competencies while fostering students' confidence and engagement.

Figure 1. Stages of Literacy and Numeracy Habituation Activities (Bias Litnum)

Student Engagement and Behavioral Changes during the Implementation of Bias Litnum

The observations of the classroom, the documentation, and the data of an interview suggest that the engagement of students could be noticed significantly when the Bias Litnum program is implemented. It can be observed that students were more involved in the literacy work, especially when shared reading was involved. A lot of students read aloud willingly, answered the questions of a teacher and showed their interest in talking about reading materials. This increased involvement implies that the program was non-formal; it was also routine meaning that students were more at ease with the academic content.

These are further supported by the interview data with the students. Students noted that they liked Bias Litnum sessions due to the fact that the activities were less formal and they could share the ideas they had freely without worrying that they would be absolved. Some students also mentioned that they were less shy to ask questions and raise opinions during such lessons than they are during regular lessons. In interviews, teachers also admitted that students who were once passive started to be interested in participating orally, which is a positive change in the pattern of classroom interaction. These results confirm the opinion that supportive learning conditions are important in promoting student interest in literacy and numeracy learning (World Bank, 2019; Niklas et al., 2016; Roche et al., 2023; Kihwele & Mkomwa, 2023; Aini et al., 2024; Taye & Mengesha, 2024).

Written work by students is also documented and represents one more sign of more involvement and gradual development of skills. Students who have their writings analyzed exhibit evidence that there is better sentence construction, coherence, and relevance to the reading materials with time (Naini & Ulya, 2025). In interviews, teachers observed that even those students who initially had difficulties in conveying

ideas by writing eventually grew more confident and did not have to rely on instructional scaffolding. One of the teachers said that a constant experience of short writing tasks was beneficial because it enabled students to get acclimated to the style of expressing their thoughts: it could be argued that habituation made the students less anxious about writing activities. The trend is consistent with the findings of studies that highlight the importance of routine practice as a way of reinforcing early literacy skills (Pratiwi, 2021; Terrell & Watson, 2018; Zhang & Bingham, 2019; Selman & Dilworth-Bart, 2024).

This was also the same case in numeracy activities. Recording of numeracy worksheets shows that there has been enhanced accuracy and consistency in the work performance of students especially in some simple addition and subtraction works. It was observed that the students became more persistent in solving numerical problems and were more open to trying to solve problems on their own. Interview materials indicate that students had shown better attention in the numeracy lessons and talked more and more with the teachers about the methods of solving problems. The research findings indicate that contextual and repetitive numeracy tasks were not only beneficial in acquiring the skills but also those that led to the sustained engagement.

Outside the academic interaction, the Bias Litnum program has been proven to influence the students in their non-academic learning patterns. There has been an observational data showing a high level of curiosity, persistence, and collaboration behavior levels when engaged in group activities. Students were also noted to help peers and share ideas and conduct discussions as they undertook both literacy and numeracy assignments. The teacher interviews showed that students displayed an increased level of social confidence and cooperation particularly when participating in cooperative problem solving tasks. Moreover, the students themselves stated that they obtained a feeling of pleasure in the chance of collaborating and learning with other students, which indicates that the program developed positive social interactions, as well as cognitive growth.

All in all, the results confirm that Bias Litnum program had a positive impact on the student engagement both academically and behaviorally. The combination of contextualized activities performed regularly in an accommodative learning environment promoted active engagement, assurance, and group work among students. These findings suggest that the literacy and numeracy habituation programs can make holistic student development in situations where they are applied in a constant manner with responsive instructional practices.

Impact on Students' Literacy Competencies

The results indicate that the Bias Litnum program has a positive impact on students' literacy competencies, particularly in reading comprehension and written expression. Interview data from classroom teachers consistently emphasize noticeable improvements in students' ability to identify main ideas, understand text content, and relate reading materials to their personal experiences. Teachers reported that students gradually shifted from surface-level reading practices toward more meaningful engagement with texts. This shift was evident in students' ability to retell stories, answer comprehension questions, and provide simple interpretations during post-reading discussions. Such developments suggest that repeated exposure to structured yet non-formal literacy activities supported deeper cognitive engagement with reading materials.

Students' interview responses further support these findings. Many students expressed increased confidence in reading aloud and reported enjoying opportunities to discuss stories with classmates. Students indicated that the relaxed atmosphere of the Bias Litnum sessions reduced anxiety associated with reading, allowing them

to participate more actively without fear of making mistakes. Teachers confirmed that this sense of safety encouraged students who were previously reluctant readers to engage more frequently in literacy activities. These findings align with OECD (2018), which emphasizes that sustained literacy practices in supportive environments are essential for strengthening reading comprehension and communication skills.

The written work of learners will give objective data on development of written expression. It has been documented that, as the program progressed, the responses of students in writing became more apparent, applicable to the texts, and more organized logically. Some of the students were able to put together simple but coherent sentences that showed an interpretation of story content. Despite the fact that grammatical accuracy was still the issue that had to be developed, the information obtained during the interview showed that the main aspect that was to be improved was the intention to write and share ideas among the students. One of the teachers stated that the students who at first created disjointed answers started to write complete sentences as a result of regular attendance in the program. This development suggests that the aspect of literacy habituation fosters confidence and fluency in written communication.

The teachers also indicated that Bias Litnum program led to a greater interest in reading in non-classroom environment. The data obtained during the interviews show that students were more interested in reading at home and that they were willing to share stories with their relatives. This change influenced teachers as it indicated that literacy activities could no longer be seen as academic tasks only but as important and fun experiences. This fact is noteworthy, as the past research has found low reading motivation as one of the key impediments to the development of literacy at the elementary level (Abidin et al., 2020). The focus of the program on relatable texts and web-based discussion-based activities can be seen to have contributed in treating this challenge.

In addition, interview information indicates that the program helped in fostering positive reading culture in the classroom. The educators noted that students were learning to equate reading to fun and communication, instead of stress and evaluation. It was reported that students were able to talk about stories during and outside of sessions with their peers, which meant that literacy practices were also applied in the informal circumstances of peer interaction. This culture change helps to prove that even the literacy programs based on habituation can impact not only the acquisition of skills but change the attitude of students towards reading. On the whole, the results prove that the Bias Litnum program was successful to help students develop their literacy skills and positive dispositions to reading, thus helping them to develop literacy in the long run.

Impact on Students' Numeracy Competencies

In addition to literacy outcomes, the findings indicate that the Bias Litnum program exerted a positive influence on students' numeracy competencies. Interview data from classroom teachers consistently highlight improvements in students' understanding of basic arithmetic concepts and their ability to apply these concepts in contextual problem-solving situations. Teachers reported that students became more confident when engaging with numeracy tasks and were increasingly able to articulate their reasoning during classroom discussions. These observations suggest that routine exposure to numeracy activities helped reduce students' anxiety toward mathematics and supported the development of conceptual understanding.

Classroom observations further confirm these interview findings. During numeracy sessions, students were observed actively participating in problem-solving activities and demonstrating greater willingness to explain how they arrived at their answers.

Rather than focusing solely on obtaining correct results, students increasingly engaged in discussions about strategies and reasoning. Interviews with students revealed that they enjoyed solving practical problems related to everyday situations and felt a sense of pride when they were able to explain their solutions to classmates. This shift indicates that numeracy learning became a more meaningful and engaging experience for students.

Documentation of students' numeracy exercises provides concrete evidence of skill improvement over time. Analysis of worksheets shows increased accuracy in basic arithmetic operations, particularly addition and subtraction, as well as reduced dependence on teacher assistance. Students were observed making fewer computational errors and demonstrating greater fluency when completing numeracy tasks independently. Teachers attributed these improvements to the contextual nature of the activities, which enabled students to connect abstract numerical concepts with familiar real-life situations. This finding aligns with UNESCO (2017), which emphasizes that numeracy skills develop more effectively when mathematical learning is grounded in practical contexts.

Beyond procedural skills, teachers also reported noticeable improvements in students' logical and analytical thinking abilities. Interview data indicate that students became more adept at identifying number patterns, estimating quantities, and selecting appropriate strategies to solve problems. Teachers noted that routine numeracy practice encouraged students to think more systematically and reflect on their problem-solving processes. Interviews with students further revealed that they enjoyed explaining their reasoning and learning from peers' approaches, which reinforced collaborative learning and deeper understanding of mathematical concepts.

The findings suggest that the Bias Litnum program supported the development of students' numeracy competencies in a comprehensive manner. The integration of contextual tasks, routine practice, and discussion-based learning not only improved students' basic arithmetic skills but also fostered reasoning, confidence, and problem-solving abilities. These outcomes are consistent with OECD (2019), which argues that effective numeracy education should extend beyond procedural mastery to include reasoning and analytical competencies essential for everyday decision-making and future learning.

Supporting Factors and Implementation Challenges

The findings identify several factors that supported the successful implementation of the Bias Litnum program at the school level. Interview data consistently highlight strong institutional support from the school principal as a key enabling factor. Teachers reported that leadership support ensured the program was formally scheduled, protected from disruption, and aligned with the existing curriculum structure. This administrative backing allowed teachers to implement Bias Litnum consistently without perceiving it as an additional burden, thereby strengthening commitment and sustainability. Collaboration among teachers also emerged as an important supporting factor, as teachers shared materials, strategies, and reflections to improve the quality of literacy and numeracy activities.

Parental support was identified as another contributing factor, although its presence varied across students. Interview data indicate that some parents encouraged children to practice reading and basic counting activities at home, reinforcing learning experiences beyond the classroom. Teachers perceived this home reinforcement as beneficial for students' confidence and skill development, particularly for those who showed rapid progress. Students' interviews further suggest that encouragement from parents helped normalize literacy and numeracy practices as part of daily routines rather than solely school-based tasks. These

findings underscore the role of home–school collaboration in strengthening habituation-based learning programs.

Despite these enabling conditions, the results indicate that there are a number of challenges that influenced program implementation. Among the most commonly mentioned problems was the vast amount of disparity in the literacy and numeracy levels of students at the very beginning. According to teachers, this heterogeneity required constant instructional responses especially between supporting less successful students and maintaining interest in more-skilled students. Despite the adoption of differentiation strategies, teachers admitted that it was difficult to address the needs of a diverse group of learners in limited periods of time.

Shortage of resources was also found to be a major constraint. According to the interview data the insufficiency of various reading materials and numeracy teaching resources limited the richness and variety in the activities. Educators found that using the same materials over and over again may reduce innovation and limit the possibilities of higher learning. This issue is similar to those in the previous literature on literacy and numeracy programs in resource-restricted settings that posit that scarce instructional resources may hinder the success of the program (Fitria & Kurniawan, 2022).

On balance, the results suggest that despite the solid institutional backing, teacher collaboration, and the partial involvement of parents, the Bias Litnum program can be maintained in the long run only in the case of tackling the current problems. Professional support to the teachers and regular provision of resources necessary to support the learning process is necessary so that habituation-based literacy and numeracy programs can improve their depth and quality. These findings remind the importance of the fact that an instructional design is not the only factor that influences successful implementation but instead it is framed by structural and contextual factors in the school setting.

Implementation of the Literacy and Numeracy Habituation Program (Bias Litnum)

The findings of this study indicate that the Literacy and Numeracy Habituation Program, locally known as Bias Litnum, has been implemented in a structured and consistent manner at SD Negeri 1 Labuhan Haji. Classroom observations revealed that the program is conducted routinely every Tuesday before the commencement of formal lessons, reflecting the school's commitment to embedding literacy and numeracy practices into daily learning routines. The activities are designed as non-formal learning sessions intended to create a relaxed yet purposeful atmosphere that encourages students' engagement. This implementation approach aligns with the principles of habituation-based learning, which emphasize consistency, repetition, and contextual relevance as key mechanisms for strengthening foundational competencies (Pratiwi, 2021).

During each session, students participate in a sequence of integrated literacy and numeracy activities that are adapted to their developmental levels. Observational data show that literacy activities typically begin with shared reading using short texts or storybooks related to students' everyday experiences. These texts are deliberately selected to foster comprehension rather than rote decoding, enabling students to engage meaningfully with the content. This practice corresponds with OECD (2018), which emphasizes that effective literacy instruction should prioritize comprehension and interpretation over mechanical reading skills. Following the reading activity, students are guided to produce simple written responses, such as summarizing the story, expressing opinions, or relating the text to personal experiences. These writing tasks serve as an extension of reading comprehension and provide insight into students' developing expressive abilities.

Numeracy activities are implemented as contextual exercises that encourage students to apply basic mathematical concepts in familiar situations. Observations revealed that tasks often involve counting objects, solving simple addition and subtraction problems, and recognizing number patterns using examples drawn from daily life, such as market transactions or household activities. Teachers intentionally avoid abstract numerical drills, instead emphasizing real-world applications to help students internalize mathematical concepts. This approach reflects UNESCO's (2017) assertion that numeracy development is most effective when mathematical reasoning is connected to practical and meaningful contexts. Overall, the implementation of Bias Litnum demonstrates coherence between program objectives and classroom practices, supporting the development of students' literacy and numeracy competencies through routine and contextual engagement.

Teacher Strategies in Facilitating Literacy and Numeracy Activities

The results further highlight the central role of teachers in shaping the effectiveness of the Bias Litnum program. Interview data reveal that teachers perceive themselves not merely as instructors but as facilitators who guide students through literacy and numeracy experiences tailored to their abilities. Teachers reported deliberately adjusting the complexity of reading materials and numeracy tasks to accommodate diverse student competencies within the classroom. This adaptive strategy was also evident in classroom observations, where teachers provided differentiated support, such as additional explanations or guided practice, to students who experienced difficulties.

Teachers' facilitation strategies include the use of visual media, storytelling techniques, and interactive questioning to sustain students' attention and motivation. According to teacher interviews, visual aids such as picture books and simple learning media are particularly effective in supporting students with lower reading proficiency. These strategies align with findings by Fitria and Kurniawan (2022), who emphasize that teacher creativity and instructional flexibility are critical factors in strengthening literacy and numeracy at the elementary level. Teachers also reported that post-reading discussions are used to stimulate students' critical thinking and encourage them to articulate ideas verbally before transitioning to written responses.

In numeracy sessions, teachers adopt a guided problem-solving approach, encouraging students to explain their reasoning rather than focusing solely on correct answers. Interview data suggest that teachers intentionally prompt students to describe how they arrive at solutions, thereby fostering logical thinking and mathematical communication. This instructional practice reflects OECD (2019) recommendations that numeracy instruction should emphasize reasoning processes to enhance conceptual understanding. The presence of teaching assistant students from the Kampus Mengajar program further enriched instructional practices by introducing innovative learning media and providing additional support during activities. Teachers acknowledged that this collaboration contributed to a more dynamic learning environment and facilitated the implementation of varied instructional strategies.

Student Engagement and Learning Behaviors

Findings from observations and documentation indicate a noticeable increase in student engagement during the implementation of the Bias Litnum program. Students were observed to participate actively in reading sessions, with many demonstrating enthusiasm through volunteering to read aloud or respond to teacher questions. Compared to regular classroom lessons, the habituation sessions appeared to create a more inclusive learning atmosphere, where students felt comfortable expressing ideas without fear of making mistakes. This finding is

consistent with World Bank (2019), which underscores the importance of positive learning environments in promoting student engagement and motivation.

Documentation of student work further supports these observations. Samples of written responses show gradual improvements in sentence construction, coherence, and relevance to the reading material. Teachers reported in interviews that students who initially struggled to express ideas in writing became more confident and required less scaffolding over time. Similarly, numeracy worksheets demonstrate increased accuracy and consistency in basic arithmetic tasks, particularly in addition and subtraction. These changes suggest that repeated exposure to literacy and numeracy activities through habituation contributes to incremental skill development, as supported by Pratiwi (2021).

Beyond academic engagement, the program also appears to influence students' non-academic learning behaviors. Observational data reveal that students increasingly demonstrate curiosity, persistence, and collaborative behaviors during group activities. Teachers noted that students became more willing to ask questions and assist peers, indicating the development of social learning skills alongside cognitive competencies. Such outcomes reinforce the argument that literacy and numeracy programs can contribute to holistic student development when implemented in supportive and interactive contexts.

Impact on Students' Literacy Competencies

The results indicate that the Bias Litnum program has a positive impact on students' literacy competencies, particularly in reading comprehension and written expression. Interview data from teachers consistently emphasize improvements in students' ability to understand the main ideas of texts and relate them to personal experiences. Teachers observed that students gradually shifted from surface-level reading to more meaningful engagement with texts, as evidenced by their ability to retell stories and provide simple interpretations.

Analysis of student writing samples supports these perceptions. Over the course of the program, students' written responses show increased clarity and relevance, with many demonstrating the ability to construct simple but coherent sentences. While grammatical accuracy remains an area for improvement, the overall progression suggests that regular literacy habituation fosters students' confidence and willingness to express ideas in writing. These findings align with OECD (2018), which highlights the role of sustained literacy practices in strengthening comprehension and communication skills.

Moreover, teachers reported that the program helped cultivate a reading culture within the classroom. Students began to view reading not as an obligatory task but as an enjoyable activity, particularly when texts were relatable and discussion-oriented. This cultural shift is significant, as previous studies have identified low reading motivation as a major barrier to literacy development in elementary schools (Abidin et al., 2020). The results therefore suggest that habituation-based literacy activities can contribute not only to skill acquisition but also to positive attitudes toward reading.

Impact on Students' Numeracy Competencies

In addition to literacy outcomes, the Bias Litnum program demonstrates a measurable influence on students' numeracy competencies. Teachers reported improvements in students' understanding of basic arithmetic concepts and their ability to apply these concepts in contextual problems. Classroom observations confirm that students became more confident in solving numeracy tasks and explaining their reasoning during discussions.

Documentation of numeracy exercises reveals increased accuracy and reduced reliance on teacher assistance over time. Students were observed to make fewer computational errors and demonstrate greater fluency in addition and subtraction tasks. Teachers attributed these improvements to the contextual nature of numeracy activities, which allowed students to connect abstract concepts with familiar situations. This finding is consistent with UNESCO (2017), which emphasizes that numeracy skills develop more effectively when learning activities are grounded in real-life contexts.

Furthermore, teachers noted that students' logical thinking skills improved as a result of routine numeracy practice. Students became more adept at identifying patterns and estimating quantities, suggesting that the program contributed to broader mathematical reasoning abilities. These outcomes align with OECD (2019), which argues that numeracy education should extend beyond procedural skills to include reasoning and problem-solving competencies.

Supporting Factors and Implementation Challenges

The findings also identify several factors that support the successful implementation of the Bias Litnum program. Strong institutional support from the school principal and collaboration among teachers were cited in interviews as key enablers. Teachers emphasized that administrative support allowed the program to be implemented consistently without disrupting the formal curriculum. Parental encouragement was also perceived as a contributing factor, as some students reported practicing reading and counting activities at home.

Despite these positive outcomes, challenges remain. Teachers reported variability in students' initial literacy and numeracy levels, which required continuous adjustment of instructional strategies. Limited availability of reading materials and numeracy teaching aids was also identified as a constraint, echoing concerns raised in previous studies on literacy program implementation in resource-limited settings (Fitria & Kurniawan, 2022). These challenges suggest that while habituation programs are effective, their sustainability depends on adequate resources and ongoing teacher support. Overall, the results demonstrate that the Bias Litnum program has been implemented effectively and contributes positively to students' literacy and numeracy development. By integrating routine, contextual, and student-centered activities, the program supports both academic and non-academic competencies. The findings provide empirical evidence that habituation-based approaches can serve as a practical strategy for strengthening foundational skills in elementary education, particularly within the context of national literacy and numeracy initiatives.

CONCLUSION

Based on research conducted at Labuhan Haji 1 Public Elementary School, it can be concluded that the Literacy and Numeracy Habituation Program (Bias Litnum) was implemented effectively and as planned. The activities, held every Tuesday, were able to foster positive reading, writing, and arithmetic habits in students through a fun and contextual approach. The role of teachers was key to the program's success. Teachers functioned not only as instructors but also as facilitators and motivators, creating an active and interactive learning environment. Support from the principal, Teaching Assistant students, and parental involvement contributed to the program's sustainability.

The implementation of Bias Litnum has been shown to contribute to improving students' basic competencies, particularly in reading comprehension, logical thinking, and numerical skills. Furthermore, the program also fostered a positive culture of literacy and numeracy within the school environment, aligning with the goals of the School Literacy Movement (GLS) and the Merdeka Belajar policy

launched by the Ministry of Education, Culture, Research, and Technology. Thus, it can be concluded that the habituation of literacy and numeracy which is implemented consistently, collaboratively, and contextually is able to improve the quality of learning and basic competencies of students in elementary schools.

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