



## **Classroom Teachers' Efforts to Overcome Mathematics Learning Difficulties (Dyscalculia) in Elementary School Students**

Rafikatul Rarifa<sup>1\*</sup>, Bella Helli yana Febria<sup>2</sup>, Moh. Ainor Rofiqi<sup>3</sup>

<sup>1</sup>Prodi PGSD, STKIP PGRI Sumenep, Indonesia

### **ABSTRACT**

*Learning difficulties in mathematics are a common problem experienced by elementary school students, particularly in basic arithmetic operations, which can impact their academic achievement and attitudes toward mathematics in the future. This study aims to examine teachers' efforts in overcoming mathematics learning difficulties among elementary school students, especially those experiencing dyscalculia. The research employed a qualitative approach using a case study method at SDN Gunggung 1, with the fifth-grade homeroom teacher selected as the research subject through purposive sampling. Data were collected through in-depth interviews and analyzed using descriptive qualitative analysis techniques. The results of the study indicate that fifth-grade students experience difficulties in mathematics, particularly in multiplication and division operations. These difficulties are caused by low learning motivation, limited parental supervision due to work commitments, and dependence on technology that reduces the habit of memorizing basic concepts. The teacher's efforts to address these challenges include strengthening multiplication memorization, implementing heterogeneous group learning, and maintaining communication with parents through home visits. This study concludes that successfully overcoming mathematics learning difficulties requires effective collaboration between teachers, schools, and parents to ensure optimal learning continuity.*

**Keywords:** Learning Difficulties; Dyscalculia; Teacher Efforts

### **1. Introduction**

Mathematics is a fundamental subject in elementary education that plays an important role in developing students' logical thinking, problem-solving skills, and numeracy abilities. However, not all students are able to learn mathematics easily. Some students experience specific learning difficulties, one of which is dyscalculia, a condition that affects an individual's ability to understand numbers and perform mathematical operations. This condition can hinder students' academic progress if not addressed properly, as mathematics is a core subject that supports learning in other areas. In this context, classroom teachers play a crucial role in identifying and addressing students' learning difficulties. Teachers are expected to implement appropriate strategies, adapt teaching methods, and

provide additional support to help students overcome their challenges in learning mathematics.

Learning difficulties are a common phenomenon in the field of education and can be experienced by every student with diverse characteristics. This condition can be understood as a situation in which a child faces real obstacles or disruptions in achieving the predetermined learning objectives (Hakim, 2025). Educational experts have categorized learning difficulties into three main areas: difficulties in reading, writing, and arithmetic, each of which requires specific approaches tailored to the individual characteristics and needs of students (Rahmawati & Witono, 2023). At the elementary school level, difficulties in learning mathematics, known as dyscalculia, are among the most frequently encountered problems and require special attention from educators. This is in line with the study conducted by Patricia & Zamzam (2019), which found that elementary school students tend to experience difficulties in mastering basic mathematical concepts, potentially leading to long-term impacts on their academic achievement and attitudes toward mathematics. This issue should not be underestimated, considering its long-term effects, which may influence overall academic performance, shape negative perceptions of mathematics, and ultimately hinder students' academic development at higher levels of education.

Despite the recognition of dyscalculia as a significant learning difficulty, there remains a gap between theoretical understanding and its practical handling in classrooms, particularly at the elementary level. Many teachers have not yet fully implemented targeted instructional strategies or early identification methods to address students' specific needs, resulting in persistent learning barriers. This problem can lead to negative impacts such as low academic achievement, decreased self-confidence, and the development of unfavorable attitudes toward mathematics. Furthermore, teachers face several challenges, including limited training in special education, lack of appropriate learning media, and diverse student abilities within a single classroom, which make it difficult to provide effective and individualized support.

Several previous studies have examined students' difficulties in learning mathematics, particularly dyscalculia, and the strategies used to address them. Research by Rulyansah, A. (2023) found that students with dyscalculia experience significant challenges in understanding number concepts and basic operations. Similarly, Kizilelma et al., (2023) reported that limited conceptual understanding contributes to students' low performance in mathematics. Furthermore, Mokotjo, (2024) emphasized the importance of using concrete learning media to support students with learning difficulties. Other studies, such as those conducted by Jyrwa, & May (2025), highlighted that teacher intervention through adaptive teaching methods can improve students' learning outcomes. In addition, Kunwar, & Sharma, (2020). revealed that early identification plays a crucial role in minimizing the impact of dyscalculia. Research by Mutlu, (2024) also indicated that collaborative learning strategies can enhance students' engagement and understanding. Lastly, Qonita, (2024) concluded that continuous teacher training and support are essential to effectively address mathematical learning difficulties in elementary school settings.

The real manifestation of this phenomenon can be observed from preliminary observations conducted through interviews with the principal of SDN

Gunggung 1. The results revealed that fifth-grade students at the school still experience substantial difficulties in mastering basic mathematical operations, particularly in multiplication and division. This condition indicates symptoms of dyscalculia that require not only targeted but also comprehensive and sustainable interventions. The impact of these learning difficulties extends beyond academic aspects, as it can also affect students' self-confidence and shape negative perceptions toward mathematics in the future. Although the urgency of this issue has been widely recognized within the educational community, in-depth studies on concrete and contextual strategies applicable to classroom practices in Indonesia remain limited. Considering the strategic role of teachers as the frontline in addressing mathematics learning difficulties at the operational level, this study aims to comprehensively analyze the efforts made by classroom teachers in overcoming mathematics learning difficulties among fifth-grade students, with a particular focus on those indicating dyscalculia. This research is expected to contribute to the development of inclusive mathematics learning models and serve as a reference for designing teacher training programs in handling students with mathematical learning difficulties.

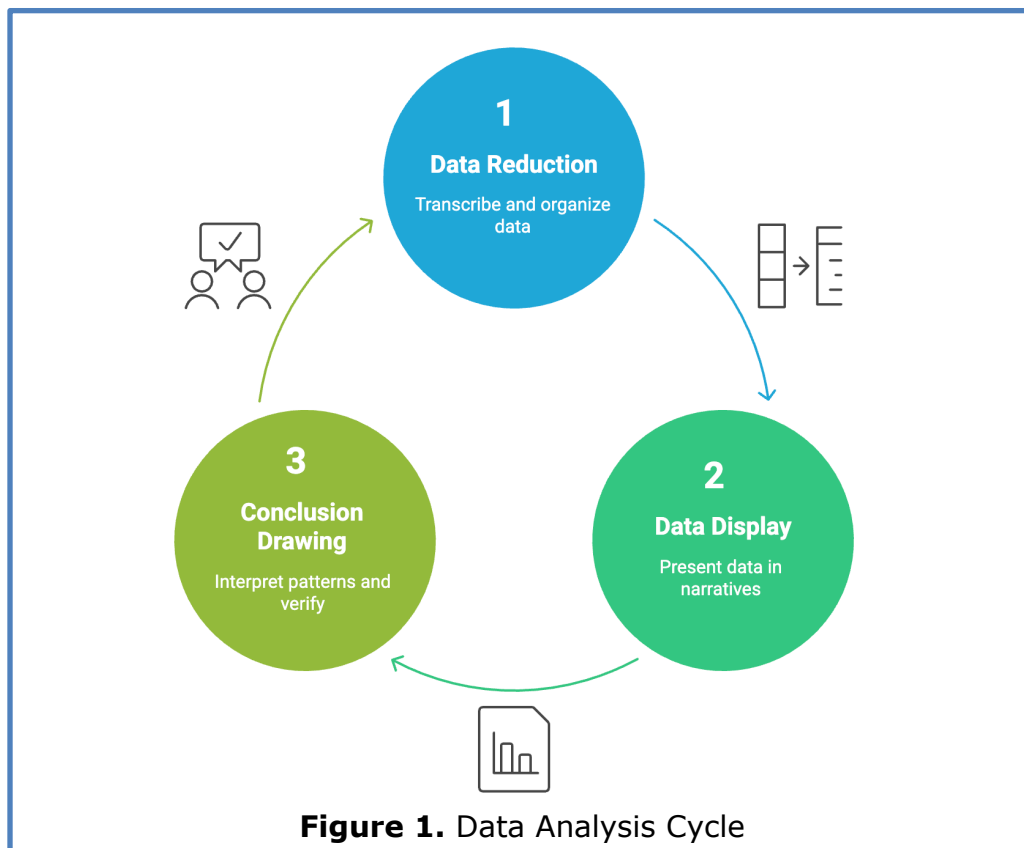
## 2. Methods

This study employs a qualitative research method with a case study design to analyze the various strategies implemented by teachers in addressing mathematics learning difficulties among fifth-grade students at SDN Gunggung 1. As stated by John W. Creswell (2014) in Pahleviannur et al. (2022), qualitative research focuses on exploring and understanding the meanings individuals or groups assign to social problems. The case study design was selected because it allows researchers to investigate contemporary phenomena within real-life contexts, particularly when the boundaries between the phenomenon and its context are not clearly defined. This research was conducted at SDN Gunggung 1, located on Jalan Tambak Sari, Gunggung Barat, Gunggung, Batuan District, Sumenep Regency, East Java. The selection of this site was based on preliminary observations indicating the presence of mathematics learning difficulties among fifth-grade students, especially in multiplication and division operations. The study was carried out on May 7, 2025, with the duration of data collection adjusted to ensure the acquisition of comprehensive and in-depth information.

The selection of research subjects in this study used a purposive sampling technique, which involves choosing participants based on specific criteria relevant to the research objectives. The criteria included: (1) direct involvement in the fifth-grade mathematics learning process, (2) practical experience in handling students with learning difficulties, (3) a comprehensive understanding of the school's learning conditions, and (4) willingness to participate in the research process. These criteria were applied to ensure that the selected subjects could provide rich and relevant information needed for in-depth analysis. Based on these criteria, the research subjects were determined accordingly. The primary data sources were obtained through interviews with the fifth-grade classroom teacher, while the secondary data were collected from interviews with the principal of SDN Gunggung 1. The combination of these data sources was intended to provide a more comprehensive understanding of the strategies used in addressing students' mathematics learning difficulties.

The data collection techniques used in this study included structured interviews and participatory observation. The structured interviews were

designed based on the theoretical framework and research objectives, ensuring that the questions were relevant and focused on the issues being investigated. Meanwhile, participatory observation was conducted to directly observe the mathematics learning process in the fifth-grade classroom, allowing the researcher to gain a real and contextual understanding of classroom activities and interactions. The research instruments, based on these data collection techniques, focused on several key aspects, including the mathematics learning difficulties experienced by students, the underlying factors contributing to these difficulties, the teaching approaches implemented by the teacher, the interaction between teacher and students during the learning process, and students' responses to mathematics instruction. In addition, audio recording devices were used during the interview process to obtain comprehensive data and to ensure that no important information was missed during transcription and analysis.



**Figure 1.** Data Analysis Cycle

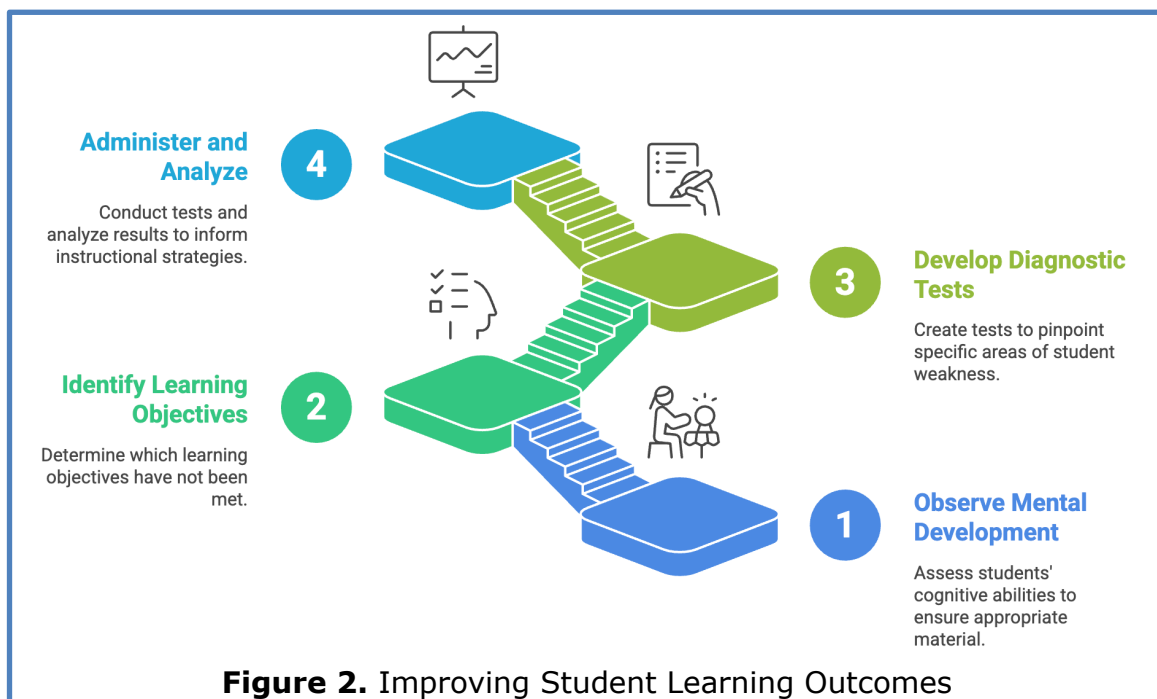
The data analysis in this study was carried out through three interrelated stages that were continuously implemented throughout the research process. The first stage, data reduction, involved transcribing all interview results, identifying the main themes from the collected data, and categorizing the information based on the research focus, namely mathematics learning difficulties, their underlying causes, and the teachers' efforts to address them. This stage aimed to simplify and organize the data so that it could be more easily interpreted. The second stage was data display, which involved presenting the reduced data in the form of systematic and descriptive narratives. The final stage was conclusion drawing and verification, conducted by interpreting patterns found in the data and ensuring their validity through triangulation techniques. This included source triangulation between the classroom teacher and the school principal, as well as method triangulation between interview and observation data, to enhance the credibility and reliability of the research findings.

### 3. Findings and Discussion

#### 3.1 Findings

#### Mathematics Learning Difficulties (Dyscalculia)

Learning difficulties are a common phenomenon in educational settings. These problems can become more complex when educators do not yet have sufficient understanding of the characteristics of learning difficulties and the appropriate ways to address them. To overcome this issue, it is necessary to identify students' learning difficulties through a process known as the diagnosis of learning difficulties. Ruseffendi, as cited in Arifin (2020), explains that the diagnosis of mathematics learning difficulties can be carried out through four systematic stages:



The image illustrates a systematic process aimed at improving student learning outcomes through a structured diagnostic approach. The first stage, *Observe Mental Development*, emphasizes the importance of assessing students' cognitive readiness to ensure that the learning material aligns with their developmental level. This is followed by the second stage, *Identify Learning Objectives*, where teachers determine which learning goals have not yet been achieved by students. By recognizing gaps in understanding, educators can focus their efforts on specific areas that require improvement, making the learning process more targeted and effective. The third stage, *Develop Diagnostic Tests*, involves designing assessment tools to identify students' specific weaknesses in learning. These tests help teachers gain deeper insights into the difficulties faced by students. Finally, in the fourth stage, *Administer and Analyze*, teachers conduct the tests and evaluate the results to inform instructional strategies. The data obtained becomes a foundation for improving teaching methods, enabling educators to implement more appropriate and effective interventions. Overall, this step-by-step approach supports continuous improvement in teaching practices and enhances students' academic achievement.

Problems in learning mathematics cannot be ignored. In the fields of medicine and psychology, this specific disorder is known scientifically as dyscalculia. Dyscalculia can be understood as a disorder caused by dysfunction in certain areas of the brain responsible for processing mathematical concepts, particularly the parietal lobe, which regulates arithmetic abilities and spatial perception. Students with dyscalculia typically exhibit distinctive patterns of difficulty that can be identified through various symptoms during the learning process. They experience significant weaknesses in applying mathematical problem-solving strategies, often leading to confusion when faced with tasks that require systematic approaches. These challenges not only affect academic achievement but also lead to frustration and decreased self-confidence in dealing with mathematics. As a result, students experience ongoing difficulties in understanding mathematical concepts in a deep and comprehensive manner.

The impact of dyscalculia is not limited to conceptual understanding but also affects other cognitive abilities related to mathematics learning. Students with dyscalculia often struggle to recall previously learned mathematical information, such as basic formulas, multiplication tables, or problem-solving procedures. Based on interviews with teachers, it was found that most fifth-grade students have difficulty recalling previously learned mathematical material. This memory impairment forces them to work harder to access knowledge that should already be stored in long-term memory. Consequently, this condition creates an additional cognitive load that can hinder the learning process and slow students' academic progress in mathematics.

Basic mathematical skills include four arithmetic operations: addition, subtraction, multiplication, and division. Difficulties in mastering these operations generally stem from misunderstandings of concepts or procedures when students process numbers, resulting in the use of inappropriate strategies. Interviews with the homeroom teacher of Grade V at SDN Gunggung 1 revealed that the most dominant learning difficulties experienced by students are in multiplication and division operations. This was observed when the teacher delivered mathematics lessons involving problem-solving tasks such as multiplication; most students in the class were not yet fluent or had not fully mastered multiplication, although a few had. This situation clearly affects students' ability to solve problems involving division.

Multiplication is closely related to division. In this context, the fifth-grade teacher believes that if students are able to master the concept of multiplication well, they will find it easier to solve division problems. This belief is based on the understanding that division is essentially the inverse operation of multiplication, where students can use their knowledge of multiplication to verify division results, or vice versa. Therefore, proficiency in multiplication becomes a fundamental foundation in fifth-grade mathematics learning, as it not only influences students' understanding of division but also contributes to the development of logical thinking and more complex mathematical problem-solving skills. A strong mastery of both operations provides students with a solid foundation for learning more advanced mathematical concepts and helps build their confidence in facing mathematical challenges. In the implementation of the current Merdeka Curriculum, students are required to engage with various learning materials that demand a comprehensive understanding of the relationship between multiplication and division. These materials include operations with fractions, solving word problems, determining the Least

Common Multiple (LCM) and Greatest Common Divisor (GCD), as well as calculating the perimeter and area of various plane shapes. All of these topics require students to be proficient in multiplication and division. When students are skilled in multiplication, they can easily understand that division is its inverse ( $a \div b = c$  means  $a = b \times c$ ), which ultimately supports their overall mathematical understanding.

This skill is highly beneficial for fifth-grade students when working on problems involving large-number division, division with decimals, or division with remainders. Moreover, in solving complex word problems, an understanding of the relationship between multiplication and division helps students determine the appropriate mathematical operations. Therefore, the teacher's perspective is highly relevant to the needs of mathematics learning in Grade 5, where mastery of multiplication becomes a key factor in understanding more complex mathematical concepts. In this context, teachers play an important role in guiding students who experience dyscalculia, as essentially every child has basic numeracy abilities when provided with appropriate instruction. Students' interest, talent, concentration, and perseverance in learning are strongly influenced by the motivation and support they receive. Therefore, teachers need to create a supportive learning environment to effectively address the needs of students with dyscalculia.

### **Factors Influencing Interest in Learning Mathematics**

The achievement of mathematics learning objectives often faces various challenges that can affect the effectiveness of the educational process. One of the main obstacles frequently encountered is students' negative perceptions of mathematics as a subject. Many students consider mathematics to be a complex and challenging field because it involves numerical concepts and operations that require abstract thinking. This perception gradually develops into a sense of rejection and decreased motivation to learn mathematics. As a result, such negative thinking becomes a barrier to the internalization and optimal mastery of mathematical concepts.

Based on interviews with teachers, students with dyscalculia tend to show low interest in learning mathematics. This is reflected in their lack of enthusiasm during the learning process. Their low interest is not merely caused by laziness or indifference, but rather as an adaptive response to repeated experiences of failure. When students consistently struggle to understand mathematical concepts, negative associations are formed, leading to rejection of the subject. This phenomenon is known as learned helplessness, where students develop the belief that their efforts will not produce positive outcomes. Mathematics, which is often perceived as difficult due to its reliance on numbers and formulas, further reduces their interest in participating in lessons. Consequently, even when teachers make efforts to engage students and deliver the material effectively, learning outcomes are still not achieved optimally.

Some students with dyscalculia also experience difficulties in visual-spatial processing, which affects their ability to understand geometry, graphs, and other visual representations. They may struggle to distinguish between similar mathematical symbols, understand concepts of position and direction, or interpret information presented in diagrams and tables. In addressing these challenges, the roles of teachers and parents are crucial in providing continuous support throughout the learning process. Teachers need to apply more creative

and accessible teaching methods, such as visual-based learning, the use of teaching aids, or contextual approaches that relate mathematics to everyday life. Meanwhile, parents can contribute by creating a comfortable learning environment at home, assisting with assignments, and building their child's confidence in their mathematical abilities. Open communication between teachers and parents allows for a shared understanding of the child's learning conditions and needs, enabling consistent learning strategies to be implemented both at school and at home.

Based on interviews with teachers, communication with parents has been established through WhatsApp to support students' independent learning at home, particularly in understanding multiplication and division. However, in practice, collaboration between school and family often faces various practical challenges. Common obstacles include parents' limited time due to work commitments, differences in understanding teaching methods between teachers and parents, and ineffective communication. Additionally, not all parents possess sufficient mathematical skills to assist their children, which may reduce their confidence in being involved in the learning process. These conditions require more creative and flexible solutions to ensure effective collaboration for the benefit of students' education.

The lack of parental supervision due to work obligations from morning to evening has limited the time parents can spend with their children. Moreover, students tend to spend their free time playing, either with peers or using gadgets. As a result, reinforcement of learning materials at home does not occur optimally, leading students to quickly forget concepts taught at school. This finding aligns with research by Ananda & Wandini (2022), which states that in the era of globalization, advances in Android technology and other digital devices have made students less motivated to memorize formulas and understand mathematical concepts. This situation is further exacerbated by irregular study habits, where students rely solely on school learning without continuing practice at home, resulting in shallow and less comprehensive mathematical understanding.

This situation disrupts the continuity of the learning process, as the material learned at school is not reinforced or reviewed sufficiently at home. Such conditions hinder the development of students' academic abilities, particularly in mathematics, which requires consistent practice and repetition to build a strong foundation of understanding. Without adequate support or reinforcement outside school hours, complex mathematical concepts become difficult to comprehend in depth. Consequently, students face challenges in mastering essential mathematical skills that are crucial for their future educational levels.

### **Efforts to Overcome Learning Difficulties**

Students with dyscalculia experience unique challenges in learning mathematics and require tailored educational strategies to achieve optimal learning outcomes. Dyscalculia is a neurological disorder that directly affects the brain's ability to process numerical information and understand basic mathematical concepts, rather than merely a general learning difficulty that can be addressed through conventional methods. In this context, the role of the teacher must evolve from simply delivering material to becoming a learning facilitator who provides continuous psychological support and motivation. Teachers need to understand that the frustration experienced by students with

dyscalculia is not due to laziness or lack of effort, but rather a consequence of genuine difficulties in processing mathematical information. If not addressed appropriately, this condition can develop into math anxiety, which further worsens students' academic performance.

Considering the diversity of students' learning styles, teachers need to implement varied and inclusive instructional approaches. A combination of visual methods through graphical representations and diagrams, auditory approaches through discussions and verbal explanations, and kinesthetic learning through the manipulation of concrete objects and educational games can provide greater opportunities for students to access and understand the material according to their learning preferences. This diversification not only offers multiple pathways for information processing but also strengthens neural connections and memory through multisensory stimulation. As a result, students with dyscalculia can develop effective compensatory strategies to overcome limitations in numerical and spatial processing, enabling them to make meaningful academic progress. In elementary mathematics learning, multiplication is introduced as a fundamental concept before students learn division. This sequence is intended to ensure that students have a solid understanding of multiplication as a foundation for understanding division, given that division is essentially the inverse of multiplication. Therefore, fifth-grade teachers tend to focus on strengthening students' multiplication skills before moving on to division material. This effort is aimed at preventing students from experiencing difficulties in solving problems involving division operations.

One strategic approach implemented by teachers is identifying students who have not yet mastered multiplication fluently, particularly multiplication facts above five, and providing reinforcement programs through repeated memorization exercises. This diagnostic and remedial strategy is highly significant, as fluency in basic mathematical operations serves as a foundation for solving more complex mathematical problems at higher levels. Without automaticity in multiplication, students will face serious obstacles in solving division problems and other advanced mathematical operations, which may ultimately hinder their overall academic progress. To optimize the learning process, fifth-grade teachers also apply collaborative learning strategies by forming heterogeneous groups, where students with varying abilities can interact and support one another in a conducive learning environment. Within these group dynamics, students who have mastered multiplication act as peer tutors, assisting their classmates who are still experiencing difficulties. This peer tutoring approach has proven effective because students receiving assistance often find explanations from their peers easier to understand, as they are delivered in simpler, more relatable ways compared to explanations that may sometimes feel too complex or abstract when provided by teachers.

SDN Gunggung 1 does not yet provide a specialized teacher to handle students with dyscalculia, so the responsibility for instruction rests entirely with the classroom teacher, who must adapt teaching approaches to meet each student's needs. This situation requires regular classroom teachers to carry a dual responsibility: teaching students without learning difficulties while also providing special attention to those with diverse learning needs. Such a heavy workload is often not supported by adequate training or sufficient resources to optimally address students with special needs. As a result, despite the teachers' good intentions to support all students, the quality of educational services for

children with dyscalculia may not be maximized due to limitations in competence and available time.

The school has made efforts to establish effective communication with parents through home visit programs, particularly for students who face learning difficulties. However, the implementation of this program often encounters significant challenges. The main difficulty lies in parents' limited availability due to demanding work schedules, making direct coordination and communication difficult. This condition reflects the realities of modern life, where many parents are occupied with professional responsibilities that require substantial time and energy. This phenomenon highlights the importance of active and continuous parental involvement in supporting children's education, as parents play not only the role of providers of material needs but also as partners of the school in identifying, understanding, and addressing students' academic difficulties. Optimal parental involvement can provide additional psychological support and motivation for students in facing learning challenges.

### **3.2 Discussion**

The results of this study indicate that mathematics learning difficulties experienced by fifth-grade students, particularly in multiplication and division, are closely related to weaknesses in conceptual understanding and memory processes. Students with dyscalculia tend to struggle not only in performing calculations but also in recalling previously learned mathematical information, which ultimately affects their ability to solve problems systematically. This finding reinforces the view that mathematics learning is not merely about mastering procedures, but also about developing strong conceptual understanding and cognitive readiness. The difficulty in connecting multiplication and division concepts further demonstrates that students require more structured and meaningful learning experiences to bridge gaps in understanding. Furthermore, the study highlights the importance of strategic and collaborative efforts in addressing these learning difficulties. Teachers play a central role in implementing adaptive teaching strategies, such as reinforcing multiplication skills, applying diagnostic approaches, and facilitating peer tutoring to support students' learning. However, the effectiveness of these efforts is highly dependent on support from parents and the learning environment at home. Limited parental involvement and inconsistent learning reinforcement outside school hours contribute to the persistence of students' difficulties. Therefore, a comprehensive approach involving teachers, parents, and supportive learning conditions is essential to ensure sustainable improvement in students' mathematics learning outcomes.

Research conducted by Kenedi et al. (2019) provides a clear picture of the condition of mathematics learning at the elementary school level. The findings indicate that students' use of concepts in solving mathematical problems is still relatively low. Many students experience difficulties not only in understanding basic mathematical concepts but also in applying that knowledge to solve problems that require reasoning skills. This situation reflects a gap between theoretical understanding and practical application in mathematics learning. This gap suggests that students often memorize formulas or procedures without fully comprehending the underlying concepts. As a result, when they are faced with non-routine problems or questions that require deeper analysis, they struggle to determine appropriate strategies for solving them. This condition highlights that

mathematics learning has not yet fully developed students' higher-order thinking skills, such as analysis, evaluation, and problem-solving. Consequently, students' mathematical abilities remain limited to procedural knowledge rather than conceptual understanding.

The lack of parental supervision due to work commitments that require parents to be away from home from morning until evening has resulted in limited interaction time between parents and children. This condition reduces the level of guidance provided to students during their learning process at home, particularly in subjects such as mathematics that require consistent practice. In fact, parental involvement plays a crucial role in reinforcing students' understanding of the material learned at school. Without sufficient support and supervision, students tend to lack motivation to review and deepen their understanding independently. In addition, students often spend their free time playing, either with their peers or using gadgets. Uncontrolled use of technology can distract students from engaging in productive learning activities at home. Excessive playtime reduces the opportunity for students to revisit and strengthen their understanding of mathematical concepts. As a result, the material taught at school is not effectively retained in students' long-term memory, leading to difficulties in recalling previously learned concepts.

This phenomenon is consistent with the findings of Ananda & Wandini (2022), which suggest that advancements in technology, particularly Android-based devices, contribute to students' decreased motivation to memorize formulas and understand mathematical concepts. Easy access to technology encourages students to rely more on digital tools rather than developing independent thinking skills. Consequently, this reliance weakens students' cognitive abilities in mastering fundamental mathematical concepts. Furthermore, this situation is exacerbated by students' irregular study habits. Many students depend solely on classroom instruction without continuing their learning at home. Mathematics, however, requires continuous practice to build strong conceptual understanding. Without consistent reinforcement, students' comprehension remains superficial and does not develop optimally. Therefore, strong collaboration between schools and parents is essential to establish consistent learning habits and improve students' academic outcomes.

The advantages of this method are not only experienced by students who receive assistance, but also provide significant benefits to those who act as tutors. The process of teaching peers helps reinforce their own conceptual understanding through repetition and elaboration, allowing them to internalize the material more deeply. By explaining concepts in their own words, tutor students develop clearer and more structured thinking, which ultimately strengthens their mastery of the subject. As a result, this approach creates a mutually beneficial learning environment where all group members actively contribute to and benefit from the learning process. The implementation of this strategy is in line with the perspective of Syafiyah et al. (2024), which emphasizes the importance of teachers' ability to design and implement learning activities using appropriate approaches and strategies. When learning is structured effectively and tailored to students' needs, it can enhance the overall quality of instruction and improve students' cognitive abilities. This is particularly important for students who face challenges in mathematics learning, as well-designed collaborative strategies can support deeper understanding and foster more meaningful learning experiences.

#### 4. Conclusion

The study conducted on fifth-grade students at SDN Gunggung 1 identified several problems in mathematics learning, particularly in the topics of multiplication and division operations. The factors contributing to these difficulties include students' low learning motivation, limited parental support due to work-related commitments, and students' tendency to rely on technology, which negatively affects their ability to remember and understand fundamental mathematical concepts. In response to these issues, teachers have implemented various remedial learning strategies. These efforts include intensifying memorization exercises of multiplication tables for students who have not yet mastered them, forming heterogeneous learning groups to promote cooperative learning among students, and maintaining communication with parents through home visit programs, although their implementation often faces challenges due to parents' limited availability. The findings of the study indicate that addressing difficulties in learning mathematics requires comprehensive synergy among all educational stakeholders. Teachers are expected to develop adaptive teaching methods that align with the characteristics and specific needs of each student. Meanwhile, the active involvement of parents in providing learning support at home plays a crucial role in ensuring the continuity and effectiveness of the learning process.

#### References

- Ananda, E. R., & Wandini, R. R. (2022). Analisis Perspektif Guru dalam Mengatasi Kesulitan Belajar Siswa pada Pembelajaran Matematika Sekolah Dasar. *Jurnal Basicedu*, 6(3), 4173–4181. <https://doi.org/10.31004/basicedu.v6i3.2773>
- Andri, Wibowo, D. C., & Agia, Y. (2020). Analisis Kesulitan Belajar Matematika Kelas V Sd Negeri 25 Rajang Begantung Ii. *J-PiMat: Jurnal Pendidikan Matematika*, 2(2), 231–241. <https://doi.org/10.31932/j-pimat.v2i2.869>
- Anindya, S., Sunarsih, D., & Saefudin Wahid, F. (2022). Analisis Faktor Kesulitan Belajar Matematika pada Peserta Didik Diskalkulia. *Jurnal Ilmiah KONTEKSTUAL*, 3(02), 123–132. <https://doi.org/10.46772/kontekstual.v3i02.663>
- Arifin, M. F. (2020). KESULITAN BELAJAR SISWA DAN PENANGANANNYA PADA PEMBELAJARAN MATEMATIKA SD/MI. *Jurnal Inovasi Penelitian*, 1(5), 989–1000.
- Hakim, L. (2025). Strategi Bimbingan Konseling Guru Matematika dalam Mengatasi Kesulitan Belajar Diskalkulia pada Siswa SD Negeri Sumberadi 1 Yogyakarta. *JUANG: Jurnal Wahana Konseling*, 8(1), 15–31.
- Heryanto, Sembiring, S. B., & Togatorop, J. B. (2022). ANALISIS FAKTOR PENYEBAB KESULITAN BELAJAR MATEMATIKA SISWA KELAS V SEKOLAH DASAR. *Curere*, 6(1), 45–54.
- Jyrwa, M. K., & May, S. (2025). Learning difficulties and remedial teaching in mathematics: Insights and interventions for educators. *The Online Journal of Distance Education and e-Learning*, 13(1), 16.

- 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), 69–79. <https://doi.org/10.22342/jme.10.1.5416.69-80>
- Kizilelma, T., Bagdat, O., & Tastepe, M. (2023). Classroom Teachers' Awareness, Difficulties and Suggestions about Students with Learning Disabilities in Mathematics. *Shanlax International Journal of Education*, 11, 107-118.
- Kunwar, R., & Sharma, L. (2020). Exploring Teachers' Knowledge and Students' Status about Dyscalculia at Basic Level Students in Nepal. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(12).
- Mokotjo, L. G. (2024). Fostering inclusivity: A critical emancipatory approach to dyscalculia in primary school mathematics. *Research in educational policy and management*, 6(2), 194-208.
- Mutlu, Y. (2024). Effects of Dyscalculia on Personal, Social, Academic, Professional and Daily Life: A Case Study. *International Electronic Journal of Elementary Education*, 17(1), 89-101.
- Nurfadhillah, S., Hidayatul Maula, N., Amelia, S. A., Fitriani, M. A., Hanifah, H., Agustin, J. T., & Novyanti, A. (2021). Upaya Penanganan Kasus Diskalkulia (Kesulitan Belajar Matematika) Pada Siswa Kelas Iv Sdn Perumnas 5 Kota Tangerang. *PENSA: Jurnal Pendidikan Dan Ilmu Sosial*, 3(3), 441–452. <https://ejournal.stitpn.ac.id/index.php/pensa>
- Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, D. (2022). Metodologi penelitian kualitatif. Pradina Pustaka.
- Patricia, F. A., & Zamzam, K. F. (2019). Diskalkulia (Kesulitan Matematika) Berdasarkan Gender Pada Siswa Sekolah Dasar Di Kota Malang. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 8(2), 288. <https://doi.org/10.24127/ajpm.v8i2.2057>
- Onyishi, C. N., & Sefotho, M. M. (2021). Differentiating instruction for learners' mathematics self-efficacy in inclusive classrooms: Can learners with dyscalculia also benefit?. *South African Journal of Education*, 41(4), 1-15.
- Qonita, W. (2024). Error Analysis of Dyscalculia Children in Solving the Basic Arithmetic Word Problems Student of Inclusion Class in an Elementary School. *Sains Data Jurnal Studi Matematika dan Teknologi*, 2(1), 25-30.
- Rahmawati, A., & Witono, A. H. (2023). Metode pembelajaran untuk anak yang mengalami kesulitan belajar diskalkulia di kelas II SD. *Renjana Pendidikan Dasar*, 3(4), 225–229.
- Rulyansah, A. (2023). Reconnecting learning: An educational alternative for dyscalculia children in elementary school. *Elementary School: Jurnal Pendidikan dan Pembelajaran ke-SD-an*, 10(1), 1-15.

- Sari, N., Tanzimah, & Kuswidyanarko, A. (2023). ANALISIS FAKTOR PENYEBAB KESULITAN BELAJAR MATEMATIKA PADA SISWA KELAS IV di SD NEGERI 01 SUGIH WARAS. *Jurnal Guru Kita*, 7(2), 412–423.
- Syafiyah, M. N., Prihantoro, M. T., Attaqiy, M., & Suparmi. (2024). Analisis Siswa Diskalkulia Dalam Pembelajaran Matematika. *Jurnal Bahusacca*, 5(1), 25–36.
- Ummah, U. S., Novianti, R., & Rahmah, M. N. N. (2024). The Teacher in Guiding Students with Learning Disabilities at Inclusive Elementary School. *Special and Inclusive Education Journal (SPECIAL)*, 5(1), 61-71.
- Widiya, W., Yusnan, M., Rumbati, W. C., Febriani, E., Annurisda, W., & Cahayani, I. (2025). Peran Siswa Dalam Memecahkan Masalah Ulangan Harian Di Sekolah Dasar. *Journal of Humanities, Social Sciences, and Education*, 1(6), 25-34.