Jurnal Elementaria Edukasia
Volume 8, No. 1, Maret 2025,, 3523-3540
DOI: 10.31949/jee.v8i1.13069

p-ISSN 2615-4625
e-ISSN 2655-0857

Analysis of Learning Difficulties in Addition and Subraction Among of Second-Grade Elementary Students: A Qualitative Study

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Submitted: 2025-02-22
Revised : 2025-03-01
Accepted : 2025-03-14

ABSTRACT
This study aims to identify the challenges faced by second grade elementary school students in learning addition and subtraction. This study uses a qualitative approach with a descriptive method, which was carried out in May 2024. Data were collected through observation, interviews, and documentation, then analyzed using the Miles and Huberman interactive analysis method which includes data collection, data reduction, data presentation, and drawing conclusions. The results of the study indicate that there are internal factors, namely health conditions and physical disabilities that affect mathematical understanding, low motivation and limited interest and external factors such as parental attention, school facilities, community environment, and learning strategies that affect the effectiveness of learning mathematics. This study also found that collaboration between teachers and parents is very important in uniting student progress and overcoming difficulties faced. It is recommended that there be increased assistance in learning basic mathematical operations by educators or parents, as well as the use of questions that are in accordance with the stages of student learning using concrete media and parental involvement in improving mathematics learning skills.
Keywords: *Addition and Subtraction, Learning Difficulties, Mathematics*

ABSTRAK
Penelitian ini bertujuan untuk mengidentifikasi tantangan yang dihadapi oleh peserta didik kelas dua sekolah dasar dalam pembelajaran penjumlahan dan pengurangan. Penelitian ini menggunakan pendekatan kualitatif dengan metode deskriptif, yang dilaksanakan pada bulan Mei 2024. Data dikumpulkan melalui observasi, wawancara, dan dokumentasi, kemudian dianalisis menggunakan metode analisis interaktif Miles dan Huberman yang meliputi pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa terdapat faktor internal yaitu kondisi kesehatan dan ketidakmampuan fisik yang mempengaruhi pemahaman matematika, motivasi rendah dan minat yang terbatas serta faktor eksternal seperti perhatian orang

tua, fasilitas sekolah, lingkungan masyarakat, dan strateji pembelajaran yang mempengaruhi efektivitas belajar matematika. Penelitian ini juga menemukan bahwa kolaborasi antara guru dan orang tua sangat penting dalam menyatukan kemajuan peserta didik dan mengatasi kesulitan yang dihadapi. Disarankan adanya peningkatan pendampingan dalam pembelajaran operasi matematika dasar oleh pendidik atau orang tua, serta penggunaan soal-soal yang sesuai dengan tahapan pembelajaran peserta didik dengan menggunakan media konkret dan keterlibatan orang tua dalam meningkatkan keterampilan belajar matematika.
Kata Kunci: Penjumlahan dan Pengurangan, Kesulitan Belajar, Matematika

INTRODUCTION

Education is an effort that is planned with full awareness to bring about changes that lead to maturity in thinking, attitude, behavior, and other aspect (Rahman et al., 2022). Law No. 20 of 2003 emphasizes that the goal of national education is to increase individual capacity and form a just moral and cultural character in order to achieve intellectual and social progress in society (Ujud et al., 2023). According to Kurniani Ningsih et al., (2021) Education is a fundamental need that cannot be ignored, because through this process, a qualified and competent generation can be formed, becoming the main stay for the development of society. Education not only plays a role as a means to improve the quality of life of individuals, but also as a platform that provides opportunities to optimize potential, strengthen identity, increase intelligence, and hone crucial skills in facing challenges in the future era. The importance of education lies in the development of deductive thinking capacity and high-level cognitive skills, which are reflected through the use of mathematics as the main instrument in the learning process.

Mathematics plays a very important role in scientific and educational progress at all levels, from elementary school to college. In addition to being a tool for solving complex problems in various fields, mathematics also forms critical and analytical abilities in each individual. This discipline not only provides techniques for overcoming intellectual challenges, but also develops systematic and logical thinking skills (Matulessy et al., 2022). Mathematics is a branch of science that develops by sharpening logical thinking capacity, reasoning ability, and building structured and consistent thought patterns. According to Rosalinda et al., (2023) Mathematics is integral to everyday activities, especially in the context of in-depth measurements and calculations. By engaging in mathematics learning, it is expected that students can hone their analytical thinking skills regularly, as well as develop logical, creative, and critical skills. A deep understanding of mathematical concepts not only supports practical problem solving, but also broadens insight into the application of modern science and technology in various contexts.

According to Sudrajat (2020) Mathematics is an essential component of daily routine, playing a central role in the advancement of science and technology. A deep understanding of mathematical concepts by students is an essential prerequisite that is inevitable in developing logical thinking capacity and decision-making skills in today's era of fierce competition (Pratiwi, 2021). Its presence has a significant impact especially in science and technology, where mathematics serves as an important foundation in the development of theory and practical applications that support progress in various fields of science and technology (Siti Julaeha, 2022).

The educational process at various levels of education and disciplines faces various obstacles, including the understanding and application of mathematical principles (Ireniza et al., 2023). Before starting learning about the arithmetic operations of addition and subtraction, it is important for students to gain a strong understanding of the concept of place value. This concept is very basic because it concerns the grouping and relative value of the digits in a number. A deep understanding of the position system (place value) is an important foundation in analyzing the structure of numbers and their contribution to the overall value of a number. This understanding is key in the context of learning mathematics, which helps individuals to recognize number patterns and carry out mathematical operations in a structured manner. Success in grasping the concept of place value is a top priority for educators in teaching mathematics to students, especially starting from the early stages of learning at the elementary level of education. The process of learning mathematics often faces various challenges that hinder students' understanding (Kurino & Herman, 2024). These challenges include common errors in making calculations, difficulties in understanding geometric concepts, and difficulties in applying mathematical concepts in the context of everyday life (Arrosyad et al., 2023).

Diversification of factors that trigger difficulties in the teaching and learning process for each individual student shows its great relevance. Especially in the context of mathematics learning, educators are required to implement concepts through various interesting and adaptable learning strategies, in order to facilitate deep understanding for students (Lestari et al., 2020). According to Ireniza (2023), The use of innovative mathematics learning methods plays an important role in facilitating students to understand the concepts taught. This approach not only makes the learning process more interesting but also reduces the level of difficulty that students may face. The impact is a significant increase in students' academic achievement in mathematics. These methods invite students to be actively involved in the teaching and learning process, increase information retention, and promote the application of mathematical concepts in relevant and applicable contexts. A study of learning difficulties in the second grade of UPT SDN 7 Gresik shows that although intelligence level plays a role as one of the potential influencing factors, there are other variables that contribute to this phenomenon. The implication is that learning achievement does not solely depend on intelligence level alone, but is influenced by complex factors that go beyond the aspect of intelligence alone.

Based on data collected from observations, it was found that students faced significant challenges in understanding mathematics subjects. As a result, students often lost their enthusiasm and motivation when dreaming with mathematical content. Students in phase A showed a limited level of participation in class discussions. Daily evaluation data showed that students' achievements in basic arithmetic operation skills had not yet reached the minimum standard required to achieve graduation.

Based on previous research findings, it was found that second grade students often experience challenges in understanding the objectives of mathematical problems and face difficulties in carrying out calculations continuously (Ilham Raharjo et al., 2021). In addition, there are also obstacles in reading ability and other factors that also influence students' learning difficulties. Students often face difficulties when trying to understand basic mathematical concepts, perform arithmetic operations, recognize special symbols, and understand mathematical terminology used in various problem contexts (Diniarti et al., 2024).

The results of an interview interaction with a second-grade teacher at the Elementary School Technical Implementation Unit (UPT SDN) 7 Gresik highlighted a significant problem in mathematics learning, namely the difficulty of students in mastering the basic concepts of addition and subtraction. This information was obtained from the teacher in the context of research on curriculum implementation at the elementary level. Based on the results of the analysis of interview and exam data that showed potential for improved performance, this study aims to explore the obstacles faced by students in understanding the concept of addition and subtraction operations. This study was conducted on second-grade students at UPT SDN 7 Gresik with a focus on identifying factors that influence students' difficulties in gaining an understanding of the material. By applying relevant analysis methods, it is hoped that this study can provide deeper insight into this problem.

METHODS

Type and Design

This study uses a descriptive method by applying a qualitative approach. This approach emphasizes the interpretation and analysis of data, which is conveyed through verbal descriptions and the use of language as a tool to describe the phenomenon being investigated. The research was carried out in May 2024 at UPT SDN 7 Gresik, Gresik District, Gresik Regency.

Data and Data Sources

Based on the results of observations and interviews, there were 27 second grade students who could be used as research subjects. In this study, the descriptive method was chosen as the main approach to present and analyze the problems that arise in the mathematics learning process, especially related to the addition and subtraction operations taught in grade second of elementary school. Students were analyzed by providing questions related to mathematical operation techniques, especially in the context of addition and subtraction.

Data collection technique

The methods applied in this study include the use of observation, interviews, and documentation. Observation and interview instruments were used to collect information on the obstacles faced in understanding mathematical concepts and the factors that play a role in overcoming these challenges. Observations were conducted to directly observe students' learning patterns, while interviews were used to explore individual perspectives on students' experiences in solving mathematical problems. Documentation was also used to collect written evidence that supports the analysis of factors that contribute to students' difficulties in learning mathematics.

Data analysis

This study applies a well-known qualitative data analysis model developed by Miles & Huberman. This approach involves three main processes, namely reducing data complexity, presenting relevant data, and formulating conclusions based on the findings obtained. This method is considered effective in exploring and analyzing qualitative information in depth to support scientific research (Aisyi, 2020). In the data reduction process, researchers synthesize and select essential elements. Moreover, the focus of the research lies on cardinal aspects with efforts to identify relevant patterns and themes. With this data redaction process, a more

detailed picture is presented for the accumulation of research information. In this study, students' academic achievement began with a significant increase. After this achievement was achieved, students were selected as the focus of the research. The next process involves data reduction in preparation for in-depth analysis. The final step involves the presentation of relevant data, leading to the collection of crucial information to gain substantial understanding in solving this research problem.

RESULTS AND DISCUSSION

Research result

Based on research conducted at UPT SDN 7 Gresik, several significant obstacles were found in the implementation of the learning process, especially related to student competence in solving mathematical problems involving basic arithmetic operations, namely addition and subtraction. Students face significant challenges in understanding and solving problems involving basic mathematical operations. These obstacles can come from various factors, such as a lack of deep understanding of concepts or difficulty in implementing the correct operational steps. To overcome this problem, several steps have been implemented:

1. **Causal Factors Not Helping to Learn Mathematics**
    a. Internal Factors
        1) Physical Health

Different physiological factors have the potential to cause difficulties in understanding mathematical concepts for students. Research shows that although health problems do not directly cause mathematics learning difficulties, frequent absences related to health conditions can hinder students' ability to follow and understand mathematics material consistently.

Disturbing physical ill-health is the most common health problem and impacts students. Students often have difficulty maintaining concentration while studying, especially when studying mathematics. This indicates that the physical health of students is not good. This less than ideal physical condition can also interfere with students' ability to understand what is taught by the teacher. This is in accordance with research Prastyawan et al., (2022) Good physical health is essential to improving students' academic achievement. This is because good physical health improves concentration and mental fitness, which helps students achieve better learning outcomes.

Overall, most students do not deal with significant health problems. However, important health factors must still be considered, where teachers have a role to guide students to maintain their health. Moreover, parents are also advised to control their children's diet and rest time, so that students can remain in prime physical condition and be able to absorb mathematics lessons optimally. This is evidenced by the health participant table that has been summarized by the local Public Health Center (Puskesmas).

TABEL KESEHATAN SISWA KELAS 2B
UPT SD NEGERI 7 GRESIK

NO	NAMA	KESEHATAN			
		GIGI	TELINGA	MATA	KUKU
1	AFDHAL GILANG ADITYA	Gigi berwarna kuning	Normal	Normal	Bersih
2	AFIA SYAFRINA	Caries geraham bawah kanan	Normal	Normal	Bersih
3	ALI NUR RAHMAT	Caries geraham atas kanan	Normal	Normal	Bersih
4	ANGGUN RAGIL FITRIAH	Caries geraham kiri kanan bawah	Normal	Normal	Bersih
5	ANINDITA KEISHA ARIFIN	Caries geraham kiri kanan bawah	Normal	Normal	Bersih
6	ANNISA FAIHA APRILLI	Caries geraham kiri bawah	Normal	Normal	Bersih
7	ANNISA SALSABILA RAMADHANI	Normal	Normal	Normal	Bersih
8	ARSYILA CAHAYA RAMADHANI	Normal	Normal	Normal	Bersih
9	ASYHA RUBY ANASERA	Normal	Normal	Normal	Bersih
10	AULIA IZZATUN NISA	Normal	Normal	Normal	Bersih
11	AURELIA NAFHAH QABILA	Normal	Normal	Normal	Bersih
12	DIAN MAYA SIFANI	Caries geraham kanan kiri bawah	Normal	Normal	Bersih
13	FITRIA RAHMA AULIA	Caries geraham kanan kiri bawah	Normal	Normal	Bersih
14	MUHAMMAD ADITYA PRATAMA	Gigi sungil kanan atas	Normal	Normal	Bersih
15	MUHAMMAD AKBAR RAMADHAN	Caries geraham kanan kiri bawah	Normal	Normal	Bersih
16	MUHAMMAD ALFINO RAMADHAN	Normal	Normal	Normal	Bersih
17	MUHAMMAD NOVA ARIYANTO	Caries geraham kanan atas kiri bawah	Normal	Normal	Bersih
18	MUHAMMAD RISQI WAHYU SAPUTRA	Normal	Normal	Normal	Bersih
19	MUHAMMAD RIZKY ADITYA PRATAMA	Normal	Normal	Normal	Bersih
20	MUHAMMAD SHAFI NABILILLAH	Normal	Normal	Normal	Bersih
21	MUHAMMAD WAFI ABQARI	Normal	Normal	Normal	Bersih
22	MUTIARA CITRA PUTRI SHEINDRA	Normal	Normal	Normal	Bersih
23	RAHMAN FADLI AL GHAZALI	Caries geraham kiri bawah	Normal	Normal	Bersih
24	RISKA AULIA RAHMAN	Normal	Normal	Normal	Bersih
25	SYAFIRA DWI AZZAHRA	Overbite	Normal	Normal	Bersih
26	WAHYU AGUNG	Normal	Normal	Normal	Bersih
27	SAN ALI ABDUL GHANI	Normal	Normal	Normal	Bersih

Figure 1: Shows the student health table.

The picture above shows the health results that have been carried out by the local Health Center. Get as many as 40% of students have poor health. This can cause a decrease in the quality of learning in students. Thus, students are given directions as to how to maintain cleanliness and personal health.

2) Physical Disability

There were two participants trained in this study, according to the results of observations and interviews. When a learner experiences long-term limitations physically, mentally, intellectually, or sensorily, the term "intellectual disability" is used. This condition can prevent the participant from participating effectively and fully in society, which should be based on the idea of equality of all human beings (Lubis et al., 2023). Students with mild mental retardation (MWA) and reactive relational problems (MRAP) often face challenges in managing the material presented by educators. Cognitive delays experienced by MWA students can interfere with their intellectual function, inhibit awareness, and hinder the learning process. Students with reactive responsive problems (MRAP) often face significant challenges in social, emotional, and behavioral aspects. These symptoms arise due to variations in the brain's information processing mechanisms or responses to environmental stimuli. In this context, students tend to have difficulty interacting and communicating with others, which can affect the overall development of students. As a result, students' capacity to acquire knowledge, communicate, and interact with other individuals may be significantly impaired.

Research involving educators indicates that students with these disabilities are given additional time after learning sessions to support the students' learning process. Collaboration between educators and parents has also proven effective in providing additional guidance in the home environment. However, there are cases where parents of students do not fully accept this assistance and rely more on direct guidance from teachers at school.

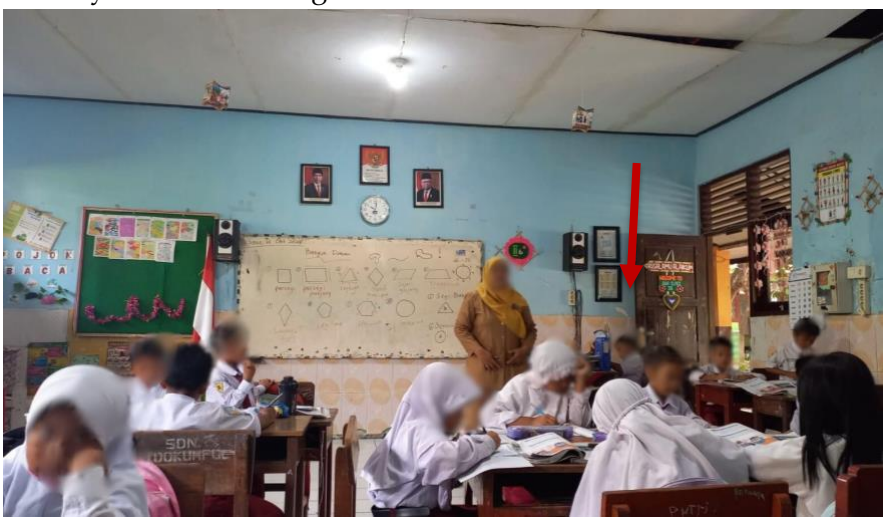

Figure 2: Students who experience reactive responsiveness.

Figure 3: Students who experience mild mental retardation.

The picture above shows how students (MRAP) experience responsive reactive problems that make it difficult for the child to interact and experience delays in learning, so that the student is given more attention and sits near the class teacher. While the next picture shows that there are students (MWA) who experience mild mental retardation who are difficult to communicate with because the spelling of the words spoken is irregular and have eye disorders that cause their vision to decrease.

3) Student Learning Interests

The results of the study showed that students from the AGA, RAR, and WA groups tended to have lower interest in mathematics, because students believed that mathematics was a complex subject. In addition, the results of interactions with teachers in the second grade

showed that students' interest in mathematics subjects still showed a significant level of reluctance. Students' direct responses showed that mathematics was often considered difficult and confusing.

Helping in learning arises when students' interest in mathematics is low. This decrease in interest can cause various difficulties in understanding complex mathematical concepts. This perception is in line with the view Wahyuni (2021) The importance of interest in the topic of learning is crucial in increasing student involvement in the educational process. Teachers need to ensure that the teaching methods used can attract student interest by connecting the subject matter with topics or contexts that are of interest to students. This not only increases interest in learning, but also facilitates better understanding because students tend to be more involved and motivated in the learning process. According to Khotimah et al., (2023) Students who lose interest in mathematics often feel that the subject is too complicated and confusing. Students consider mathematics to be full of excessive formulas, which makes students reluctant to follow the learning. Difficulty in calculating is a major obstacle for students in understanding mathematical concepts in depth.

Students often do not follow the teacher's explanation carefully because they are involved in various activities that distract students, such as playing, talking to friends, or even just being silent. To observe students' interest in learning mathematics, research was conducted by observing students' behavior during the learning process. This is reflected in the ability of students to give full attention to the teacher when explaining the material, active involvement in learning such as actively asking or providing answers to teacher questions, and students' habits in taking notes on the material presented.

During the observation, AGA seemed less focused on the teacher's explanation of the material by diverting his attention to his friends around him, both of them sitting on the right side of his row of chairs and behind him. In addition, RAR in a similar situation, also showed the same tendency by not focusing his attention on the teacher's explanation of the material, but was more interested in playing alone with objects such as books, nails, pens, rulers, and even the chair where he was sitting. Meanwhile, WA also showed a similar behavioral pattern by not following the teacher's explanation of the material, appearing to be caught up in daydreaming.

Based on the results of interviews with teachers regarding the level of student attention during the presentation of the material, it was found that some students sometimes did not fully focus on the explanation given. This was seen when students were distracted by personal toys, often distracted in daydreams, or lost concentration.If grouped, a table will be formed that shows students' interest in learning mathematics.

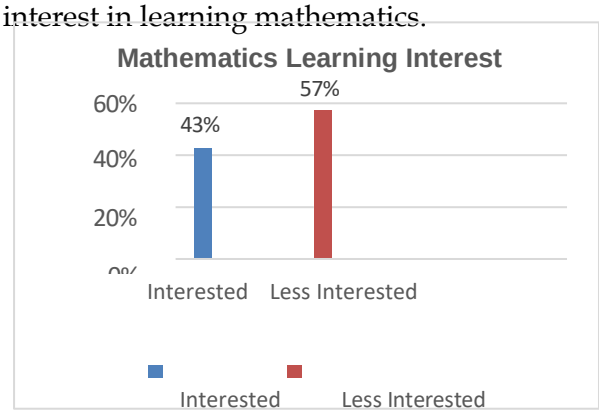

Table 1: Table of interest in learning mathematics

The table above shows the percentage of the results of interest in learning mathematics in second grade students. The results show that 57% of students still have limited interest in learning.

4) Student Motivation

Based on observations and interactions with AS, DMS, and AIN students, it was revealed that students' learning motivation was still lacking. When at home, students tend not to repeat the material that has been taught at school. When mathematics learning begins, students show discomfort. On the other hand, when there is a mathematics test, students do not prepare to study seriously.

Low learning motivation has been shown to be a major factor contributing to decreased achievement in mathematics. When the enthusiasm for learning decreases, students tend to face difficulties in understanding complex mathematical concepts. This indicates the need for a holistic approach in increasing learning motivation in order to stimulate students' interest and active involvement in mathematics learning. similar to research by Pratama et al., (2021) If students have low learning motivation, it can have a big impact on students' behavior during the learning process. As a result, students tend to lose their enthusiasm for learning mathematics, which can lead to ongoing learning difficulties in the field.

Based on the observation results, in each learning session in class, teachers routinely provide encouragement for about ten minutes before starting the lesson material. Apparently, low levels of motivation in students can be caused by the lack of development of internal motivation given by parents at home. If parents do not pay enough attention to their children, this can cause children to be unenthusiastic about learning at school. Students' academic achievement is greatly influenced by students' intrinsic motivation. Teachers often provide verbal encouragement and examples of attitudes needed by students to succeed. Cooperation between teachers and parents is essential in providing sufficient attention to increase students' intrinsic motivation. This aims to prevent difficulties in understanding and mastering mathematics material.

Figure 4: The teacher provides motivation to students.

b. External Factors

1) Lack of Parental Attention

The results of interviews with AS and AIN students showed that students admitted that they did not receive much attention from their parents, which had an impact on how students studied at night. Many of the students' parents worked as traders or factory workers, experiencing fatigue at night so that they were less able to support their children's learning process at home. This situation could be a factor that influences students' difficulties in understanding mathematical concepts.

The role of parents is very important in supporting the development of children's education, especially in terms of directly supervising the learning process at home. In this context, there are records showing that some students face significant difficulties in grasping the essence of mathematics lessons, and feel a lack of adequate direction from parents in the home environment. Research by Asriyanti et al., (2020) explains that parental indifference to children's education at home can have a negative impact on students' learning abilities, especially in the context of mathematics lessons. This can hinder students' understanding of the subject matter being taught.

This condition arises because the independent activities of the participants were raised at home without parental support, which emphasizes the need for continuous attention and support from parents during their children's educational process. The study also highlighted that parents' busyness at work often prevents adequate monitoring of their children's academic progress at school. Research by Permatasari et al., (2023) explained that due to the busyness of the work world, many people face obstacles in providing educational guidance to their children in the home environment. This results in minimal interaction between parents in accompanying their children in completing school assignments.

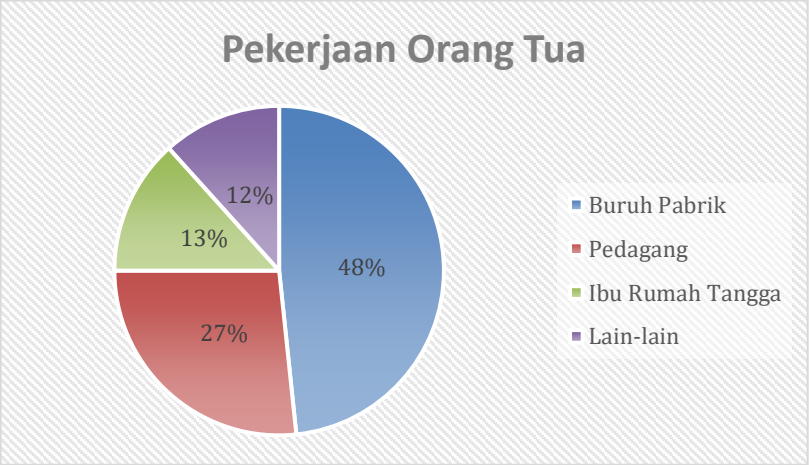

Table 2: Job diagram of students' parents.

According to the results of interviews conducted by the author with homeroom teachers, it was found that less than 25% of parents do not work outside the home. While the rest have jobs that require them to be active outside the home. This causes parents not to have enough time to give more attention to students.

2) School Facilities and Infrastructure

Educational facilities and infrastructure in schools play a crucial role in increasing the effectiveness of mathematics learning. The infrastructure facilities available in schools are not only intended to create a conducive learning environment, but also to ensure the safety and comfort of students. This shows the school's commitment to maintaining the quality and standards of their buildings as an integral part of the educational process. Classrooms are equipped with efficient air ventilation systems, ensuring sufficient air flow to reduce humidity and keep the classroom comfortable during the teaching and learning process. However, physical segregation between classrooms can interfere with students' cognitive focus, especially when neighboring classrooms are experiencing disruptions or busy activities. Schools need to ensure that classroom design does not hinder the efficiency of the educational process, as this has the potential to disrupt the quality of learning. Therefore, educational institutions must ensure that the available classrooms are adequate and meet standards to support optimal teaching and learning activities. Educational institutions must also build new classrooms so that students feel comfortable while studying (Permatasari et al., 2023).

The researchers found that no classrooms utilized LCDs to help teachers deliver materials more interestingly during observations. The layout of the classroom field also did not support mathematics learning because students were distracted when other students were doing sports activities on the field. Unfavorable learning situations like this can disrupt learning.

Figure 5: School Computer Lab.

Figure 6: Mosque as a place of worship.

Figure 7: Provision of first aid medicine cabinets in each class.

Figure 8: The author conducted an interview with the homeroom teacher and it was seen that the classroom was directly focused outside the classroom.

Based on the results of interviews with class II teachers, it was revealed that LCD projectors are not available in every classroom. However, if needed, teachers can bring students to the laboratory to use the device. Thus, students still have the opportunity to understand the material well and learning becomes more interesting and interactive.

3) Community Environment

Based on the results of interactions with students from the AS and AIN groups, it was revealed that they often engage in recreational activities during school hours, which results in reduced time available to complete homework or to study, especially in the context of mathematics subjects. The social background of students has the potential to hinder optimal achievement in mathematics learning, resulting in challenges in understanding these concepts. The many activities in the community where students live, the presence of children in community activities can interfere with the learning process, therefore the role of parents in observing children's participation is very important. This step aims to ensure that children remain focused on their academic tasks, especially in studying mathematics subjects that require high perseverance and dedication.

similar to what was stated by Heryanto et al., (2022) The social environment significantly influences the learning process of students. The presence of educated and well-behaved individuals in society can encourage students to behave positively and motivate students to learn more, in the hope of achieving education that is equal to those around them. Conversely, if society is dominated by individuals who are less educated and behave negatively, students tend to be influenced by such behavior, which is not in accordance with the character of an educated individual.

4) Learning strategies

Learning strategies are a series of methods and activities that are systematically designed by educators and students to achieve learning goals optimally. The preparation of this strategy plays an important role in regulating interactions and information flow in the classroom, influencing significant dynamics and efficiency of the learning process. Meanwhile, according to Harry Khairunnisa Dwi et al., (2023) Learning strategies are a series of activity plans that involve the use of methods and exploitation of resources and potential available in the planned educational process to achieve certain goals.

Observations showed that teachers generally taught using lecture and practice methods. However, when interviewed, teachers stated that in teaching mathematics, teachers prefer to use practical learning strategies, such as counting the number of items in the classroom. During the observation process, this practical learning strategy was only applied a few times in learning activities.

The teaching approach generally applied by educators often seems less interesting and tends to be monotonous. This often causes boredom in students, especially in the context of mathematics lessons which are often seen as complex and difficult subjects to understand. When students are involved in learning mathematics in an interesting and enjoyable context, students' perceptions of the complexity of this subject may experience significant changes. Students tend to reduce the view that mathematics is complicated and difficult. The positive impact is reducing the challenges for students in the learning process. Based on the results of

research conducted by Musdalifah et al., (2024) Mathematics is known as a challenging subject due to its abstract nature. When inappropriate and inefficient learning methods are applied in mathematics learning, it can increase students' dislike of the subject.

Figure 9: Providing a Reading Corner to support learning.

2. Efforts to Help Help Learn Mathematics

a. Increase Practice Questions

The main difficulties faced by students in learning mathematics include challenges in mastering basic skills and difficulties in applying knowledge to solve problems. The ability to perform mathematical operations such as addition, subtraction, multiplication, and division is part of mathematical skills.

It is very important for teachers to provide more practice questions to improve the understanding of students who have difficulty in mathematics. This intensive practice can be done outside of class time, such as by giving homework that allows monitoring of the progress of students' mathematical abilities. Thus, students will have more opportunities to develop their mathematical skills through organized and promoted practice.

Based on the results of observations and interview interactions with educators and students, various strategies have been implemented to overcome the learning challenges faced by students. Some students actively participate in tutoring activities after Maghrib until 19.30, from Monday to Thursday, while a number of other students choose to study in groups in the home environment. By implementing these various approaches, it is hoped that it can reduce the difficulty in understanding the mathematics material that students are accustomed to.

Figure 10: The teacher gives practice questions.

Giving practice questions is very effective to train the mastery method in learning mathematics. This is done by the teacher when the learning is about to finish.

b. Using Concrete Learning Media

Students at the elementary school level, according to Piaget's cognitive development theory, are in the concrete operational stage. At this stage, students tend to use real or concrete objects as the basis for their thinking, and are not yet able to think abstractly (Andri Wibowo & Agia, 2020). For this reason, concrete learning media is important to be presented in mathematics learning.

Based on the results of the analysis, it can be seen that the use of learning media by educators is still not optimal in the current learning situation. The impact is seen in the limited understanding of students towards the concepts taught. Based on the theory and findings from the research results, it was identified that strategies to reduce difficulties in learning mathematics depend on the difficulties faced and their supporting factors. One effective approach is the use of concrete learning media, which can help students understand mathematical concepts better. In addition, increasing the frequency of practice questions is also an important strategy to deepen students' understanding. Close cooperation with parents has also been shown to support mathematics learning by providing consistent support and understanding from the educational environment at home and at school.

Figure 11: Working on the problem using the available concrete objects.

c. Establishing Cooperation with Parents

The results of the analysis show that the role of parents is very important in providing incentives to students. Children's desire to learn at school is greatly influenced by parents who offer support at home. Therefore, parents should continue to check their children's math skills. Parents should also maintain their children's eating habits and sleep times to ensure their children stay healthy while they are learning math at school.

To increase student motivation, the role of parents and teachers is very significant. Teachers can utilize educational strategies recommended by Gage and Berliner to achieve this goal (Septiana et al., 2023):

1) Verbal praise, such as giving compliments like “good” or “nice”, will encourage students to do something desired.
2) Don't use test scores to punish or compare students to one another; instead, use test scores to provide information about students' abilities and progress. If you do it wrong, you will reduce the desire to learn.
3) Cultivate students' interest and motivation to explore.

4) Utilizing games that involve students directly in the learning process One way to overcome difficulties in learning mathematics, according to theory and research, is to use concrete learning media, collaborate with parents, and increase practice questions.

In this context, collaboration between teachers and parents through the WhatsApp group platform is an effective means to strengthen coordination and synergy in achieving the desired educational goals. Parents have the opportunity to obtain more in-depth information about their children's academic progress at school through direct interaction with grade II teachers. This participation not only strengthens the relationship between parents and schools but also ensures that educational efforts receive comprehensive support from environmental involvement.

Figure 12: Holding a meeting with parents.

CONCLUSION

The conclusion of this study reveals various challenges faced by second grade elementary school students in understanding the concept of addition and subtraction. Internal factors such as health conditions, interests, and motivation of students, as well as external factors such as parental support, school facilities, community environment, and teaching methods, play an important role in influencing mathematics learning difficulties. These findings emphasize the importance of collaboration between teachers and parents in integrating student learning development and overcoming the difficulties faced by students. Educators can also utilize concrete objects around them as media that facilitate the learning process. Therefore, increasing assistance in learning basic mathematical operations by educators or parents, as well as the use of questions that are appropriate to the learning stages of students, is highly recommended to help students overcome learning difficulties.

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