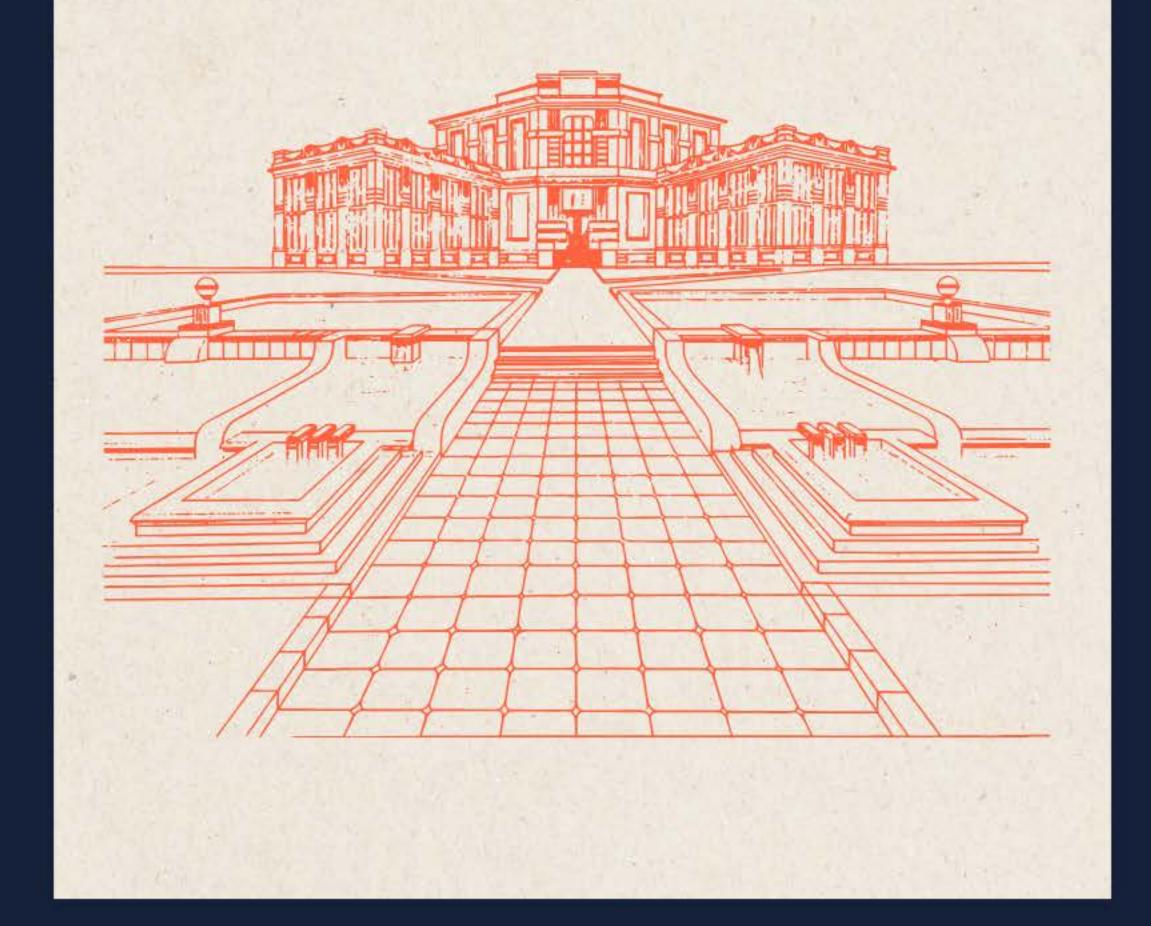


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# DESCRIPTION OF VERBAL BULLYING BEHAVIOR IN RK BUDI LUHUR PRIMARY STUDENTS

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### **ABSTRACT**

This study investigates verbal bullying behavior among students at RK Budi Luhur Elementary School, focusing on its prevalence, forms, and impact on mental health and academic performance. The findings indicate that verbal bullying is the most prevalent form of bullying within the school environment, with an alarming 95.1% of respondents reporting exposure to such behavior. Female students are particularly affected, comprising 55.9% of the victims. The most common forms of verbal bullying include insults and teasing, often targeting physical appearance, which leaves a lasting emotional imprint on the victims. These findings underscore the critical need to address the issue comprehensively to ensure a safe and supportive educational environment. The impact of verbal bullying on students is profound, influencing both their academic achievement and psychological well-being. Among the surveyed students, 40% reported experiencing negative consequences, including a decline in academic performance and the onset of mental health challenges such as anxiety, low selfesteem, and even depression. The stress caused by constant verbal harassment disrupts students' ability to focus and participate actively in classroom activities. Over time, this can lead to a loss of interest in school and a decline in overall motivation. Furthermore, victims of verbal bullying often struggle to form healthy relationships with peers, as the humiliation and fear of further ridicule isolate them socially. These effects highlight the extensive and far-reaching consequences of verbal bullying, making it a significant issue that demands immediate intervention. To provide a broader perspective on the issue, this study also analyzed findings from research conducted in six countries—Australia, the Philippines, Brazil, Indonesia, Turkey, and Spain—published between 2016 and 2020. The global data consistently demonstrate that verbal bullying is a pervasive problem affecting primary school students across diverse cultural and socio-economic contexts. The studies reveal commonalities in the nature of verbal bullying, such as insults related to physical appearance, intelligence, or social status, as well as its damaging impact on victims' mental health and academic outcomes. This international comparison underscores the universality of the problem while also highlighting the need for context-specific strategies to combat bullying effectively. At RK Budi Luhur Elementary School, the findings emphasize the urgency of implementing targeted intervention and prevention programs to address verbal bullying. Such initiatives should involve collaboration among educators, health professionals, and families to create a comprehensive approach to the problem. Educators play a crucial role in identifying bullying behavior early and fostering a positive classroom atmosphere that discourages aggression. Training programs for teachers can equip them with the skills to recognize signs of bullying, mediate conflicts, and promote inclusivity among students. Health professionals, including school counselors and psychologists, are essential in providing support for victims, helping them cope with the emotional toll of bullying, and building resilience. Parental involvement is equally vital in addressing verbal bullying. Parents need to be aware of the signs that their child may be a victim or perpetrator of bullying and actively participate in creating a supportive home environment. Workshops and informational sessions for parents can enhance their understanding of verbal bullying and

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empower them to guide their children toward positive social interactions. Furthermore, involving students themselves in anti-bullying campaigns can foster peer support networks and encourage accountability within the school community. In conclusion, verbal bullying at RK Budi Luhur Elementary School represents a significant challenge that has serious implications for students' mental health and academic success. The study highlights the importance of collaborative efforts between educators, health professionals, and families to address this issue effectively. By implementing comprehensive intervention and prevention programs, the school can create a safer and more inclusive environment where all students can thrive. These efforts not only mitigate the immediate impacts of bullying but also contribute to the long-term development of a more empathetic and respectful school culture.

Keywords: Bullying, Elementary School Students, Verbal Bullying

### INTRODUCTION

This journal discusses the problem of verbal bullying among RK BUDI LUHUR elementary school students, with a special focus on its impact on girls. Bullying, especially in verbal form, has been identified as a significant problem affecting the well-being and development of children in school settings. Research shows that verbal bullying often takes the form of insults and insults, which can have a negative impact on students' mental health and academic performance (Defriani, 2024).

Data shows that most victims of verbal bullying are female students, who experience greater social and emotional stress due to these bullying acts. The main reason behind bullying is often related to physical appearance, which creates an unsafe and unsupportive environment for the victimized student.

With verbal bullying increasingly prevalent in various countries, including Spain, Australia, the Philippines and Türkiye, it is important to understand the context and impact of this behavior. This research aims to provide deeper insight into the phenomenon of verbal bullying, as well as encouraging the development of effective intervention and prevention programs in elementary schools. Through literature analysis from various studies, this journal seeks to provide useful information for educators, health professionals and parents in dealing with bullying problems in the school environment.

Bullying has become a prevalent issue within educational settings, affecting students' mental health, self-esteem, and overall academic performance. Among various forms of bullying, verbal bullying is particularly concerning due to its pervasive nature and long-lasting psychological impact (Jamsai & Boonnak, 2023). Verbal bullying involves the use of words to demean, humiliate, or harm others, and it often manifests through insults, teasing, or threatening remarks.

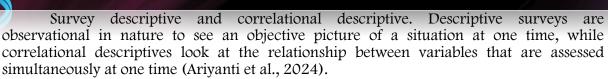
In primary schools, verbal bullying poses a significant challenge, as children in this developmental stage are highly impressionable and sensitive to social interactions. Negative verbal exchanges during these formative years can lead to anxiety, depression, and reduced self-confidence, potentially affecting their future relationships and achievements.

The focus of this study is RK Budi Luhur Primary School, where anecdotal observations and preliminary reports suggest occurrences of verbal bullying among students. Despite its potential consequences, verbal bullying often goes unnoticed or unaddressed due to the subtle nature of its expression. Understanding the patterns, triggers, and perceptions surrounding verbal bullying in this context is crucial for devising effective intervention strategies.

This study aims to describe the characteristics, frequency, and dynamics of verbal bullying behavior among students at RK Budi Luhur Primary School. By shedding light on this issue, the research seeks to inform educators, parents, and policymakers about the importance of fostering a supportive and inclusive school environment.

### **RESEARCH METHOD**

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This study employs a descriptive qualitative approach to explore and understand the phenomenon of verbal bullying behavior among students at RK Budi Luhur Primary School. The qualitative method was chosen to capture the depth and complexity of students' experiences and interactions, allowing the researcher to gather rich, detailed data about the behaviors, contexts, and perceptions surrounding verbal bullying. Data collection was carried out using a combination of observations, interviews, and document analysis, ensuring a comprehensive understanding of the issue from multiple perspectives.

The participants of this study were selected using purposive sampling, focusing on students who were directly or indirectly involved in verbal bullying incidents, as well as teachers and school staff who could provide additional insights into the school environment. The inclusion criteria ensured that the participants had relevant experiences and knowledge about verbal bullying, which was critical to achieving the research objectives. Consent was obtained from participants and their guardians, and ethical considerations, such as confidentiality and anonymity, were strictly maintained throughout the study.

Data collection began with non-participant observations conducted during class hours, recess, and extracurricular activities to identify instances of verbal bullying and the contexts in which they occurred. The researcher recorded these observations in detailed field notes, paying attention to the language used, the tone of interactions, and the social dynamics among students. Semi-structured interviews were then conducted with selected students and teachers to gain deeper insights into the motivations, reactions, and impacts associated with verbal bullying behavior. The interview questions were open-ended, allowing participants to freely express their thoughts and experiences (Prayuda et al., 2024).

The data were analyzed using thematic analysis, which involved systematically coding and categorizing the information to identify recurring patterns and themes. The analysis process began with an initial reading of the data to familiarize the researcher with the content, followed by iterative coding to organize the data into meaningful units (Wicaksono et al., 2021). The identified themes were then interpreted in the context of the research objectives, highlighting the key characteristics, causes, and effects of verbal bullying behavior in the school setting.

By integrating multiple data sources and employing rigorous analytical methods, this study provides a nuanced understanding of verbal bullying behavior in RK Budi Luhur Primary School. The findings are intended to serve as a foundation for developing targeted interventions and fostering a more inclusive and supportive school environment.

### **DISCUSSION**

The results and discussion section of the journal centers on an analysis of eight research articles that delve into verbal bullying behavior among elementary school students. These articles provide valuable insights into the nature, prevalence, and implications of verbal bullying in educational settings, employing diverse methodologies to explore the issue. The majority of these studies utilized survey descriptive and correlational descriptive approaches, each offering distinct perspectives on the phenomenon (Wu et al., 2023). By examining these methods and their findings, the study aims to shed light on the scope of verbal bullying and its impact, particularly in the context of RK Budi Luhur Elementary School.

Descriptive survey methods, commonly used in the analyzed articles, aim to present an objective snapshot of verbal bullying behavior at a specific point in time. These surveys collect data on the frequency, forms, and contexts of bullying, providing a comprehensive overview of the issue as experienced by students. This method is particularly effective in capturing the immediate realities of bullying, such as the prevalence of insults and teasing related to physical appearance or other personal characteristics. The data obtained through

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descriptive surveys serve as a foundation for understanding the scale of the problem and identifying patterns that may inform targeted interventions. For instance, the high incidence of verbal bullying among certain demographic groups, such as female students, can guide educators and policymakers in developing gender-sensitive anti-bullying strategies.

In contrast, descriptive correlational methods focus on examining the relationships between verbal bullying and its outcomes, particularly in terms of students' learning achievements and mental well-being. This approach highlights the interconnectedness of bullying behavior and its consequences, revealing how verbal harassment can disrupt academic performance and psychological health. For example, the findings often show that students who experience frequent verbal bullying tend to exhibit lower academic motivation, reduced classroom participation, and higher levels of anxiety or depression (Kurniati et al., 2023). By exploring these correlations, researchers can identify critical areas where intervention is needed, such as improving classroom dynamics or providing mental health support for victims. These insights underscore the importance of addressing verbal bullying not only as a disciplinary issue but also as a broader educational and psychological concern.

The collective findings from these research articles contribute to a deeper understanding of verbal bullying behavior and its implications for elementary school students. This research is particularly relevant for stakeholders such as health workers, educators, families, and future researchers. For health professionals, the studies emphasize the need for mental health interventions tailored to young victims of bullying, focusing on building resilience and coping mechanisms. Educators, on the other hand, are encouraged to adopt proactive measures, such as creating inclusive classroom environments and integrating anti-bullying education into the curriculum. Families play a crucial role in fostering open communication and providing emotional support, ensuring that children feel safe and valued both at home and at school.

Moreover, the findings serve as a valuable resource for future researchers aiming to expand the scope of knowledge on verbal bullying (Prayuda et al., 2023). By highlighting methodological trends and gaps in existing studies, this analysis offers a roadmap for designing more comprehensive and impactful research. For instance, while survey and correlational methods are effective in identifying patterns and relationships, future studies could incorporate experimental or longitudinal designs to explore the long-term effects of verbal bullying and evaluate the efficacy of specific interventions. Such research would further enrich the understanding of verbal bullying and contribute to the development of more robust strategies to combat it.

In conclusion, the analysis of these eight research articles underscores the multifaceted nature of verbal bullying and its significant impact on elementary school students. By utilizing descriptive survey and correlational methods, the studies provide a nuanced picture of the problem, highlighting both its prevalence and its far-reaching consequences (Morales et al., 2019). The insights gained from this research offer valuable guidance for health professionals, educators, families, and researchers, fostering a collective effort to address verbal bullying and create safer, more supportive learning environments for all students.

### CONCLUSION

That verbal bullying behavior among RK BUDI LUHUR elementary school students is a significant problem and requires attention from various parties, including health workers, educators and families. This research identifies various factors that contribute to bullying behavior and its impact on students (Bjärehed et al., 2021). The suggestions given include the need to increase awareness and education about bullying, as well as the development of effective intervention programs to prevent and deal with bullying behavior in elementary schools.

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# EFFECTIVENESS OF ANIMATED JELLYFISH MEDIA IN FACILITATION OF UNDERSTANDING THE CONCEPT OF MULTIPLICATION IN CLASS 5 STUDENTS

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### **ABSTRACT**

Learning multiplication often poses significant challenges for students, as it requires not only memorization but also a conceptual understanding of abstract numerical relationships. Many students struggle with traditional methods, which often rely heavily on rote learning and repetitive exercises, making the learning process monotonous and disengaging. Recognizing the need for more engaging and effective approaches, this study investigates the use of animated jellyfish media as a creative, interactive, and visually stimulating alternative to address these difficulties. By leveraging the appeal of animations, the study aims to transform multiplication learning into an enjoyable and meaningful experience, fostering both motivation and comprehension among students. Through an experimental design, this research compared the effectiveness of animated media with conventional teaching methods in improving the understanding of multiplication concepts among fifth-grade students. The animated jellyfish media, designed to be visually engaging and interactive, incorporates elements such as vibrant colors, dynamic movements, and game-like activities to capture students' attention and sustain their interest throughout the learning process. These animations are tailored to represent multiplication concepts in a relatable and intuitive manner, helping students visualize the relationships between numbers and comprehend the logic behind multiplication. For instance, students can observe how groups of jellyfish multiply in an animated underwater scene, offering a concrete and memorable representation of abstract mathematical ideas. The results of the study revealed a significant difference in the performance and attitudes of students exposed to animated media compared to those taught using conventional methods. Students who learned multiplication through the animated jellyfish media demonstrated not only a higher level of motivation but also a deeper understanding of the concepts. Observations and feedback from participants indicated that the engaging nature of the animations sparked curiosity and encouraged active participation, transforming the classroom into a lively and interactive environment. Moreover, the use of animations helped reduce anxiety often associated with mathematics learning, creating a positive emotional connection with the subject. Teachers reported that students were more willing to ask questions, collaborate with peers, and explore new problem-solving strategies when animated media was integrated into the lesson. The findings underscore the potential of animated media as an effective educational tool in mathematics instruction. By appealing to students' visual and cognitive learning preferences, animations facilitate a more comprehensive grasp of complex concepts, bridging the gap between abstract ideas and tangible understanding. The use of jellyfish as a thematic element not only adds a creative dimension to the learning experience but also demonstrates how familiar and appealing imagery can be harnessed to simplify challenging topics. This approach aligns with contemporary pedagogical principles that emphasize the importance of active, studentcentered learning and the integration of technology to enhance educational outcomes.

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The implications of this research extend beyond the specific context of multiplication learning. It highlights the broader need for innovation in mathematics education, particularly in the integration of multimedia resources to address diverse learning styles and needs. Animated media has the potential to serve as a versatile tool that can be adapted for various mathematical topics, making abstract concepts more accessible and engaging for students of different ages and abilities. Furthermore, this approach supports the development of 21st-century skills, such as critical thinking, creativity, and digital literacy, which are essential for success in an increasingly technology-driven world. In conclusion, the use of animated jellyfish media in teaching multiplication offers a promising alternative to traditional methods, effectively enhancing both student motivation and conceptual understanding. This research underscores the importance of incorporating innovative and interactive tools into the mathematics curriculum to improve the quality of education and foster a love for learning among students. As educators and policymakers strive to address the challenges of mathematics instruction, the integration of animated media represents a significant step toward creating more dynamic, inclusive, and effective learning environments.

Keywords: Learning Media, Animation, Effectiveness, Multiplication, Students

### **INTRODUCTION**

Based on the background of the problem above, the researcher only limited the problem to the influence of the Teams Games Tournament (TGT) learning model assisted by jellyfish media on the mathematics learning outcomes of fifth grade elementary school students on multiplication of decimal numbers (Nabila & Amir, 2022). In this case, the researcher only wants to know the effect of the Teams Games Tournament (TGT) learning model assisted by jellyfish media on the mathematics learning outcomes of fifth grade elementary school students on multiplication of decimal numbers (Saputra et al., 2023).

The low achievement of students in mathematics subjects, especially in the concept of multiplication, is a serious concern in the world of education (Hidayat & Linda, 2023). Various factors can be the cause, one of which is the lack of use of varied and interesting learning media. In fact, using appropriate media can help students build a better understanding of abstract concepts such as multiplication. This research focuses on the use of jellyfish-shaped animation media as an alternative multiplication learning media. It is hoped that the unique shape of the jellyfish and its dynamic movements will attract students' attention and facilitate the visualization of multiplication concepts. Thus, this research aims to determine the effectiveness of jellyfish animation media in increasing understanding of the concept of multiplication in grade 5 students.

The learning process is often carried out in groups. This is the teacher's effort to implement differentiated learning to meet student needs. However, the implementation of learning in groups often does not run effectively because when working on assignments or projects in groups there is still a lack of cooperation between group members. This is supported by the results of observations in class IIC when groups work on diorama projects, there are still many students who play alone so only a few students are actively involved in working on the assignment or project. Collaboration between students in learning activities can provide various experiences. They get more opportunities to speak, take initiative, make choices, and generally develop good habits. Students who work together in groups will create close friendships among students, which turns out to have a big influence on each individual's behavior or activities (Prayuda, Ginting, et al., 2023). By collaborating in learning, students can fully develop their knowledge, abilities and skills in an open and democratic learning atmosphere.

There are several reasons that influence student cooperation and obtaining low grades in mathematics, one of which is caused by the learning model. Boring learning is caused by a lack of creativity and innovation from the teaching staff concerned. Another reason is that



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in the teaching and learning process, teaching staff still use old or conventional concepts in providing material. Educators only read the material and give examples and make students only note down what is explained and do not give examples or apply it to everyday life (Sugilar et al., 2023).

To be able to overcome the problems described above, another method or other learning method is needed as an effort to encourage students to increase cooperation in groups and obtain high learning outcomes in mathematics subjects. One of these ways is by using the Team Games Tournament (TGT) learning model (Juhanaini et al., 2024). According to Slavin, this method is a group learning method that has the nature of a tournament where each student competes with each other as a representative of the group team. This Team Games Tournament learning model prioritizes the spirit of solidarity with good teamwork when competing in academic tournaments.

### RESEARCH METHOD

This research was research subjects in class 5 at SDN 060841 with a total of 26 students consisting of 12 boys and 14 girls. The research subjects were determined after the researchers made observations in class 5 (Prayuda, Sinaga, et al., 2023). Class 5 was chosen because based on the observations made, this class indicated that cooperation and mathematics learning outcomes were still low. The research method used in this research is qualitative research methods. Cresswell and John explained that qualitative research is research that is based on a methodological understanding of a social phenomenon. In qualitative research, the researcher acts as a key instrument so that insights and theories are needed that come from journals or previous research (Wardiah et al., 2022).

Data collection methods in this research include: Observation, to find out how far the effect of the action has achieved the target; Field notes, recording important events that arise that are not yet present in observations, Interview used to find out the teacher's response, Documentation, to obtain data in the form of school data, student data, photos and videos during research, Test method, to obtain data used in determining improvements in mathematics learning outcomes. The analysis is aimed at student cooperation, with indicators, involvement in group work, responsibility in group work, and trust in group work.

### DISCUSSION

Fifth-grade students at SDN 060841, located in the Medan Petisah sub-district, were the focus of research conducted by student interns from Santo Thomas Catholic University, Medan. During the initial stages of observation, these students displayed considerable enthusiasm in participating in the administered tests. However, the results revealed a significant gap in their understanding of multiplication concepts as taught through conventional methods. Despite their enthusiasm, many students struggled with grasping the fundamental principles of multiplication, resulting in confusion and difficulty when tackling multiplication problems. This observation underscored the pressing need for innovative teaching approaches that could address the limitations of traditional methods and better support student learning.

To address this issue, the interns introduced an alternative learning approach using jellyfish-themed learning media, designed to foster collaboration among fifth-grade students and create a more engaging classroom environment (Firdaus et al., 2022). This media was developed as part of a collaborative project by the intern students and tailored to meet the specific needs of the students at SDN 060841. The jellyfish learning media aimed to present multiplication concepts in a visually appealing and interactive manner, allowing students to better visualize the relationships between numbers. By incorporating group activities, the approach also encouraged teamwork, peer learning, and active participation, which are crucial for deepening students' understanding of mathematical concepts.

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The use of jellyfish learning media proved to be a promising intervention. The product, crafted by the student interns, was designed to simplify multiplication concepts while simultaneously motivating students to engage more actively in the learning process. Through vibrant visuals, interactive elements, and gamified activities, the media transformed multiplication lessons into a more enjoyable experience. This approach not only helped students overcome their initial struggles with multiplication but also fostered a positive attitude toward mathematics. Teachers observed that students were more focused, less intimidated by the subject, and willing to explore different problem-solving strategies. The media's ability to make learning both fun and meaningful helped reduce feelings of boredom and frustration that often accompany traditional methods.

Validation interviews with teachers further supported the effectiveness of the jellyfish learning media. During these discussions, class V teacher Mrs. Lince expressed concerns about the lack of understanding of multiplication among her students prior to the intervention. She noted that the students struggled to grasp the underlying principles of multiplication, often relying on rote memorization without truly comprehending the concepts (Prayuda, 2023). The introduction of jellyfish media addressed this gap by providing a more accessible and relatable way for students to learn. Teachers also appreciated how the media encouraged students to take an active role in their learning, which was reflected in improved classroom dynamics and student performance.

The findings from this research demonstrated a clear shift in students' attitudes and comprehension levels when using the jellyfish learning media. Students not only found the multiplication lessons more engaging but also exhibited a better grasp of the concepts compared to previous lessons. The interactive and collaborative nature of the media allowed them to explore multiplication in a hands-on manner, reinforcing their understanding through practice and peer discussions. Teachers reported noticeable improvements in the students' ability to solve multiplication problems and apply their knowledge in different contexts.

In conclusion, the research conducted with fifth-grade students at SDN 060841 Medan highlights the potential of innovative learning media, such as the jellyfish-themed approach, to enhance mathematics instruction. By addressing the shortcomings of traditional methods, this media provides a dynamic and effective alternative for teaching multiplication. It fosters student interest, promotes active engagement, and supports conceptual understanding, all of which contribute to better learning outcomes. These findings underscore the importance of integrating creative and interactive teaching tools into the curriculum to create a more inclusive and supportive learning environment.

### **CONCLUSION**

Conclusions describe the answer to the hypothesis and/or research objectives or scientific findings obtained (Yuliati et al., 2020). The conclusion does not contain a repetition of the results and discussion, but rather a summary of the findings as expected in the objective or hypothesis. If necessary, at the end of the conclusion you can also write down the things that will be done related to further ideas from the research.

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# A STUDY OF THE LEARNING MOTIVATION OF FOURTH GRADE STUDENTS AT SD NEGERI 068008

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### **ABSTRACT**

This research aims to identify the level of learning motivation of class IV students at SD Negeri 068008 and the factors that influence it. The method used in this research was a survey with a questionnaire distributed to 40 students. Data analysis was carried out descriptively using a Likert scale. The results of the research show that students' learning motivation is relatively high, with an average score of 4.1 on a scale of 1 to 5. Factors that contribute to students' learning motivation include interest in learning, self-confidence, and persistence in learning, all of which show a score average above 4.0. Apart from that, parental support and the role of teachers also have a significant influence on student motivation, with 85% of students feeling supported by their parents and 78% feeling positive influence from teachers. Although social interactions with peers have varying impacts, overall, the results of this study show that a combination of internal and external factors is very important in building students' learning motivation. It is hoped that this research can provide insight for educators and parents in efforts to increase students' learning motivation at school. This research also underlines the important role of the environment in the learning process. The active involvement of parents in supporting children's learning activities at home has proven to be a crucial factor in increasing students' learning motivation. Research shows that when parents provide attention and encouragement, students feel more motivated to achieve. Apart from that, the proactive role of teachers in creating a positive learning atmosphere is very influential. Teachers who are able to establish good relationships with students and use interesting teaching methods can increase students' enthusiasm for learning. In a social context, interaction with peers is a factor that needs to be considered. Although some students feel support from their friends, others feel pressured by competition. This shows the need to manage social dynamics in the classroom in order to minimize the negative impact of competition and maximize cooperation between students. Therefore, teachers need to take steps to encourage collaboration and positive communication among students. With the results of this research, it is hoped that the school can implement more effective strategies to increase student learning motivation. Schools are expected to be able to organize better parent involvement programs, as well as provide training for teachers in innovative classroom management. Through close collaboration between schools and parents, as well as greater attention to students' emotional and social needs, students' learning motivation can continue to be improvedOverall, this research makes an important contribution to educational development, especially in understanding the factors that influence student learning motivation. With a holistic and integrated approach, it is hoped that students can reach their best potential and achieve higher achievements in the future. Further research is also needed to explore other factors that may contribute to learning motivation, such as the influence of the school environment and more innovative learning strategies.

Keywords: Motivation To Learn, The Role Of The Teacher, Internal Factors

**INTRODUCTION** 

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Motivation to learn is a fundamental element in the educational process, which plays an important role in encouraging students to achieve optimal academic achievement (Usher et al., 2024). As encouragement that comes from within the individual or from the external environment, learning motivation can influence the way students deal with learning and achieve learning outcomes. In the context of basic education, learning motivation is crucial because students at this stage are building the foundations of cognitive, affective and social abilities. Deci and Ryan (2000) in Self-Determination theory explain that motivation is divided into two main categories, namely intrinsic motivation, which comes from personal interest and enjoyment of learning activities, and extrinsic motivation, which is influenced by external factors such as rewards, punishment, or social encouragement from the environment. Among fourth grade elementary school (SD) students, learning motivation has a significant impact on their ability to absorb lesson material, participate actively in class, and show optimal academic results.

SD Negeri 068008, as one of the state schools in urban areas, reflects quite wide social, economic and cultural diversity among its students (Harefa et al., 2023). Initial observations showed variations in the level of learning motivation among class IV students, where most students seemed enthusiastic and involved in the learning process, while others showed a lack of interest and participation. This phenomenon raises questions about what factors influence students' learning motivation at this level, both originating from within the students themselves and from the surrounding environment. Based on observations, factors such as interest in learning, self-confidence, parental support, as well as the role of teachers and the school environment are thought to be elements that determine students' level of learning motivation.

Research on learning motivation in students at SD Negeri 068008 aims to identify and analyze internal and external factors that influence the learning motivation of class IV students (Prayuda et al., 2023). Internal factors include things related to students such as interests, talents, perceptions of learning material, and confidence in their own abilities. Meanwhile, external factors include the role of the environment, both in terms of parental support at home and learning conditions at school, including the teaching methods used by teachers and the classroom atmosphere created. The influence of these two factors needs to be studied in more depth to determine the extent to which they contribute to student learning motivation.

By understanding the influence of these factors, it is hoped that this research can provide a clearer picture of the learning motivation conditions of fourth grade students at SD Negeri 068008 (Mahdum et al., 2019). Furthermore, the results of this research are expected to provide input for schools and teachers in designing more effective learning strategies. in increasing student learning motivation. Apart from that, parents can also gain a better understanding of their important role in supporting their children's learning motivation at home. This research has the potential to not only contribute to the development of motivation theory in the context of elementary education, but also offers practical solutions that can be implemented in elementary schools in an effort to improve student learning outcomes.

The importance of learning motivation in the basic education process cannot be separated from the role of the teacher and the school environment. Teachers, as learning facilitators, have a big influence in forming a classroom atmosphere that supports student motivation. Interesting teaching methods, the use of varied learning methods, and positive interactions between teachers and students can increase students' interest in learning. According to research conducted by Woolfolk (2016), students tend to be more motivated when they feel valued and supported by teachers, and when they are involved in learning that is relevant to their everyday experiences. Therefore, one of the main focuses in this research is to analyze the role of teachers in influencing the learning motivation of class IV students at SD Negeri 068008, both through pedagogical approaches and the emotional support provided to students.

In addition, support from the family environment, especially parents, is also a significant component in shaping students' learning motivation. Bronfenbrenner (1979) in

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developmental ecological theory explains that interactions between children and their immediate environment, including the family, greatly influence the child's overall development, including motivation to learn. Parents who are actively involved in their children's education, for example by providing encouragement, supervision, and creating a conducive learning environment at home, tend to have children who are more motivated and have good academic results. On the other hand, a lack of parental support, both in the form of attention to the child's learning process and fulfilling educational needs, can cause a decrease in learning motivation.

### RESEARCH METHOD

This research uses a quantitative approach with the aim of measuring and analyzing the factors that influence the learning motivation of class IV students at SD Negeri 068008 (Yudiawan et al., 2021). The quantitative approach was chosen because it allows researchers to obtain numerical data that can be processed statistically, thereby producing objective and measurable conclusions. The survey method is used as the main technique in data collection, where an instrument in the form of a questionnaire is given to students to determine their level of motivation and the factors that influence it.

The design of this research is quantitative descriptive research. Descriptive research aims to provide a clear and systematic picture of the phenomenon being studied, in this case student learning motivation. This research is not intended to look for causal relationships between variables, but rather to identify and describe the level of learning motivation and related factors.

The subjects in this research were fourth grade students at SD Negeri 068008 (Hattie et al., 2020). The sample was taken using a total sampling technique, where all 40 fourth grade students were used as respondents in this research. This technique was chosen because the population is relatively small and can be fully accommodated in the research process. In addition, by involving all students, it is hoped that the research results can provide a more representative picture of learning motivation in the class.

The main instrument used in this research was a questionnaire which was prepared based on indicators of learning motivation. This questionnaire was adapted from the learning motivation scale that has been used in previous research, with modifications to suit the characteristics of fourth grade elementary school students. This instrument consists of two parts: first, a part that measures internal motivational factors such as interest in learning, self-confidence, and perception of material difficulty; second, the part that measures external factors such as parental support, teacher role, school environment, and interactions with peers (Papi & Hiver, 2020). Each item in the questionnaire uses a Likert scale with five answer choices, ranging from strongly disagree (1) to strongly agree (5), which allows respondents to provide responses according to their level of agreement with the statement given.

The data collection procedure was carried out in several stages. The first stage is the preparation of the research instrument, including validation of the questionnaire by experts to ensure the instrument can measure the variables in question accurately. After the instrument was declared valid, the second stage was carrying out a survey in class IV of SD Negeri 068008, where questionnaires were distributed to all students. Filling out the questionnaire was carried out under the supervision of researchers to ensure that students understood each statement given and filled out the questionnaire honestly and completely. The third stage is the collection of completed questionnaires, which are then analyzed further.

After the data was collected, data analysis was carried out using descriptive statistical techniques. Data obtained from the questionnaire will be processed and presented in the form of frequency distribution, percentage, average and standard deviation. Descriptive statistical techniques were used to describe the overall level of learning motivation of class IV students, as well as to identify internal and external factors that play a role in influencing their learning motivation. Apart from that, a questionnaire reliability test will also be carried out to ensure the consistency of students' answers to each questionnaire item.

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Data analysis techniques are carried out with the help of statistical software such as SPSS (Statistical Package for the Social Sciences) or similar software. By using this analysis, researchers can evaluate the extent to which the measured factors play a role in shaping student learning motivation. The results of this analysis will be explained in the form of tables and graphs accompanied by interpretation to facilitate understanding of the research findings.

This research was conducted while still paying attention to the ethical aspects of research. Before the questionnaires were distributed, official permission from the school and consent from the students' parents were obtained. Students are given an explanation of the purpose of the research and guaranteed confidentiality of the information they provide. Students' participation in this study was voluntary, and they were given the freedom not to answer questions they felt uncomfortable with.

With systematic procedures and instruments that have been tested, it is hoped that the results of this research can provide a comprehensive picture of the level of learning motivation of grade IV students at SD Negeri 068008 and the factors that influence it. The results of this research will be the basis for recommendations aimed at increasing student learning motivation through appropriate intervention on the part of teachers, schools and parents.

### **DISCUSSION**

This research aims to identify the level of learning motivation of fourth grade students at SD Negeri 068008 and the factors that influence it(Papi & Hiver, 2020). Data obtained through questionnaires were processed using descriptive statistical techniques. Of the 40 students who were respondents, all questionnaires were successfully collected and analyzed. Based on the results of the analysis, in general the learning motivation of class IV students at SD Negeri 068008 is relatively high. The average level of student motivation is in the high category with an average score of 4.1 on a 1-5 Likert scale.

In more detail, the research results show that internal factors consisting of interest in learning, self-confidence, and persistence in learning make a significant contribution in shaping students' learning motivation (Dewaele & MacIntyre, 2019). The majority of students stated that they were very interested in the subjects being taught, where 80% of students responded agree or strongly agree to statements related to interest in learning. Student self-confidence is also high, with 75% of students feeling capable of understanding the material being taught, while persistence in learning shows quite good results, with 70% of students stating that they keep trying even though they face difficulties. The average score for interest in learning was 4.3, self-confidence 4.0, and persistence in learning 3.9.

On the other hand, external factors such as parental support, the role of teachers, and social interactions with peers also play an important role in students' learning motivation. As many as 85% of students stated that their parents provided high attention and support for learning activities at home, with an average score of 4.4. The role of teachers in supporting the teaching and learning process is also considered very positive by 78% of students, with an average score of 4.2. Additionally, social interaction with peers, although slightly lower, was still considered an important factor by 65% of students, with a mean score of 3.8.

The results of this research indicate that the learning motivation of class IV students at SD Negeri 068008 is in the high category (Setiawan & Wiedarti, 2020). This finding is in line with the theory of learning motivation which states that external support from the surrounding environment, including family and school, has a significant influence on students' learning motivation. Parental support is one of the key factors in increasing student learning motivation. Most students reported that their parents were actively involved in their learning activities at home, either through supervision, providing facilities, or moral encouragement. This strengthens the view that a supportive family environment plays an important role in a child's educational process, in accordance with Bronfenbrenner's developmental ecological theory which emphasizes the importance of interactions between individuals and their immediate environment in their development.

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The role of the teacher is also proven to be an important element in building student learning motivation. Teachers who are able to present material in an interesting and relevant way tend to be more successful in arousing students' enthusiasm for learning (Bower et al., 2020). This is in accordance with Bandura's self-efficacy theory, where support and positive feedback from teachers can increase students' self-confidence, which ultimately influences their motivation to achieve better. Teachers who not only teach but also build good emotional relationships with students are able to create a supportive learning atmosphere.

Overall, the results of this study confirm that student learning motivation is influenced by a combination of internal and external factors (Seli, 2019). Support from parents and teachers, as well as students' interest in learning, are the dominant factors that shape learning motivation. To increase students' learning motivation in a sustainable manner, it is important for schools and families to work together to create a supportive learning environment. Teachers need to continue to develop creative and interesting teaching methods, while parents are expected to continue to pay greater attention to their children's education at home. In this way, students' learning motivation can continue to be improved, so that they can achieve optimal learning outcomes.

### **CONCLUSION**

Based on the results of the research that has been carried out, it can be concluded that the learning motivation of class IV students at SD Negeri 068008 is in the high category (Tan, 2020). Factors that influence student learning motivation include internal factors such as interest in learning, self-confidence, and persistence in learning, as well as external factors such as parental support, the role of the teacher, and social interactions with peers. External factors, especially parental support and the role of teachers, have the most significant influence in increasing students' learning motivation, followed by students' interest in the lessons being taught.

Students' interest in learning, which is an internal factor, is proven to be the main driver that influences their active involvement in the learning process (Vermote et al., 2020). On the other hand, consistent parental support and the role of effective teachers in creating a pleasant learning environment make a major contribution to building students' enthusiasm for learning. Although social interaction with peers also plays a role, social dynamics in the classroom need to be managed well so that competition between students does not reduce their motivation.

Overall, a combination of support from the family and school environment, as well as students' intrinsic interest in learning, is the key to increasing learning motivation (Wu et al., 2020). With good collaboration between teachers and parents in creating a conducive learning atmosphere, student learning motivation can continue to be maintained and improved to support the achievement of better learning outcomes in the future.

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### ANALYZING THE STRUCTURE OF THE USE OF INDONESIAN AND ENGLISH IN THE CONTEXT OF LEARNING IN CLASS VII PRIVATE CATHOLIC SMP TRISAKTI 1 MEDAN

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### **ABSTRACT**

The purpose of this study is to analyze the structure and use of Indonesian and English in the learning of grade VII of Trisakti 1 Catholic Private Junior High School Medan. With a qualitative descriptive approach, this study involved two language teachers, namely an Indonesian teacher and an English teacher, who taught students in grade VII. The results showed that differences in language structure, such as tenses in English and sentence structure in Indonesian, affected the way students understood the subject matter. In addition, the use of everyday language by students is also important in learning. A tailored approach is needed to enable students to understand both languages well in language learning. This study shows how important training and an integrated approach between the two languages is in the educational process.

Keywords: Language Structure, Language Use, Learning, Middle School, Indonesian, English.

### INTRODUCTION

Language is the main communication tool in the learning process, and it is important to understand how the structure and use of language affect the effectiveness of student learning. In Indonesia, Indonesian is the national language and the main language of instruction in schools, while English is taught as a foreign language that students must master. This condition creates challenges in the learning process, especially in understanding the differences in the structure of the two languages. To overcome this, it is necessary to develop four language skills in students, namely listening, speaking, reading and writing.

Language error analysis is an important procedure used by researchers and teachers in improving the quality of language learning. This procedure includes collecting samples, identifying errors in the sample, explaining the errors found, classifying them based on the reasons, and assessing the seriousness of the errors (Ellis in Tarigan & Tarigan, 2011: 170). By analyzing language errors, it is hoped that it can provide many benefits, especially in teaching Indonesian. This process allows educators to understand and identify mistakes that students often make, so they can provide constructive feedback to improve their language skills.

This research was conducted at Tri Sakti 1 Medan Catholic Private Middle School with a focus on class VII students. Researchers took several samples of student observation reports for analysis to find out common language errors. Errors that are often found include errors in spelling, diction, sentence structure and paragraphs. Identification of these errors can be used as a basis for improving the quality of language teaching, especially in developing students' writing skills. Thus, language error analysis becomes very important in increasing the effectiveness of Indonesian language teaching.

At Tri Sakti 1 Medan Catholic Private Middle School, class VII is an important phase in students' language skills learning because at this level they begin to learn English as a second language. This research aims to identify errors made by students in writing Indonesian and English, especially in language aspects and the frequency with which these errors occur. The objectives of this research include identifying the main differences in the

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structure of Indonesian and English, analyzing the impact of differences in language structure on the learning of class VII students, and proposing effective learning strategies to facilitate mastery of the two languages. Thus, it is hoped that this research can make a positive contribution to the development of more effective language teaching methods in the school environment.

### RESEARCH METHOD

The research employs a qualitative descriptive method with a semi-structured participatory observation approach, aiming to explore how Indonesian and English are used in the learning process among class VII students at the Trisakti 1 Catholic Private Middle School, Medan. Observations are conducted during teaching and learning activities, focusing on the interaction between teachers and students, particularly the dynamics of using both languages. This includes analyzing how teachers use code-switching techniques to clarify material, provide instructions, and engage students in discussions, as well as how students navigate between the two languages during classroom activities.

An essential aspect of this research is the analysis of code-switching patterns that occur when transitioning from Indonesian to English or vice versa. Code-switching is a common linguistic strategy, especially in bilingual learning environments, to facilitate understanding and promote active participation. For example, teachers often use Indonesian to explain complex concepts and switch to English during practical exercises or when introducing new vocabulary. This dual-language approach aims to bridge gaps in comprehension while gradually improving students' English proficiency.

In addition to observations, the study also examines teaching documents, such as Learning Implementation Plans (RPP), teaching materials, and student assignment results. By analyzing these documents, the research seeks to identify how the curriculum integrates Indonesian and English, whether the balance between the two languages aligns with educational objectives, and how effectively this integration supports students' learning outcomes. For instance, teaching materials often emphasize bilingual instructions, aiming to encourage students to apply both languages in contextually appropriate ways.

Preliminary findings indicate that the use of Indonesian dominates classroom interactions, especially when teachers need to explain abstract concepts or provide detailed explanations in subjects such as mathematics and science. However, in English language lessons, the use of English increases significantly, particularly in segments involving grammar practice, vocabulary building, and conversational exercises. Despite this, challenges remain, as students often struggle with transitioning from passive comprehension of English to active usage, especially in spoken interactions.

To address these challenges, teachers adopt various strategies, such as scaffolding techniques, where they initially explain concepts in Indonesian and gradually incorporate English terms and phrases. This method helps students build confidence and familiarity with English while maintaining a solid understanding of the subject matter. Furthermore, group discussions and role-playing exercises are employed to encourage students to use English more actively, fostering a more immersive bilingual environment.

Document analysis reveals that while RPPs and teaching materials emphasize the integration of both languages, their practical application often leans heavily on Indonesian. This suggests a need for further development of materials and methods that provide a more balanced approach. For instance, including more interactive English-based activities in RPPs and assignments could help enhance students' engagement and language skills.

Overall, the research highlights the importance of a structured and deliberate approach to bilingual education. It underscores the potential of code-switching as an effective pedagogical tool while identifying areas where implementation can be improved. By refining teaching strategies and resources, educators can create a more dynamic and supportive learning environment, enabling students to master both Indonesian and English effectively. This approach not only prepares students for academic success but also equips them with valuable language skills for global communication and future opportunities.



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### **DISCUSSION**

Observation results show that teachers at Tri Sakti 1 Medan Catholic Private Middle School predominantly use Indonesian to explain material that is complex or requires indepth understanding, especially in subjects such as mathematics and science. In contrast, in English lessons, teachers use English more, especially when teaching grammar, comprehension and practical conversation. The use of English also occurs more often in practice or discussion sessions that involve students actively practicing their language skills.

This research was conducted on class VII students during the odd semester of the 2024/2025 academic year. The research subjects consisted of 60 students, evenly divided between classes VII-A and VII-B. Various instruments were used to support the research, such as written tests that measure students' ability to understand language structures, oral tests to demonstrate their ability to speak English, questionnaires to determine students' attitudes towards the use of language in learning, and classroom observations to record daily interactions between teachers. and students.

The research implementation included several stages, including instrument preparation, carrying out tests and questionnaires for three weeks, class observations for four weeks, and data analysis using descriptive statistics and qualitative analysis. Research data shows that students have a better understanding of Indonesian than English. In the Indonesian language test, the average student achieved 85% in the use of simple sentences, while in the English test, the average student only achieved 70% in the same aspect.

The results of the English oral test show that only 60% of students are able to use English in simple conversations. This shows that even though students have the ability to understand written English, they still face difficulties in speaking practice. The questionnaire also revealed that 90% of students felt comfortable using Indonesian in learning, while 75% of students felt that English was difficult and needed more practice.

Apart from the recommendations already mentioned, a systematic approach is needed to integrate Indonesian and English learning in the classroom. This approach may include developing a curriculum that allows students to understand the relationship between the two languages, especially in terms of sentence structure, grammar, and vocabulary. Teachers can utilize a comparative approach, namely showing the basic similarities and differences between Indonesian and English, so that students can more easily understand the unique characteristics of the two languages.

Increasing teacher competency is also an important factor in implementing this recommendation. Teachers need to receive further training to master interactive and innovative teaching strategies. Such training may include the use of educational technology, such as digital-based learning applications, which give students the opportunity to practice the language independently outside of class hours. Apart from that, mentoring by mentors or facilitators who are experts in the field of language teaching can also help teachers in designing more effective learning methods (Prayuda, Juliana, et al., 2023).

On the other hand, learning Indonesian also requires special attention, especially in the aspect of writing skills. Teachers need to provide intensive training that focuses on the use of spelling, choice of diction, and correct sentence structure. Composing narrative texts, expositions, or reports is an important exercise that can help students understand various writing genres. The use of structured feedback in correcting writing assignments is also key to helping students understand their mistakes and improve their writing skills gradually.

So that both languages can be taught equally, the role of school management in providing adequate resources is also very important. The availability of textbooks, additional teaching materials, as well as learning facilities such as language laboratories and audiovisual equipment can support the learning process of both languages more optimally. Through these steps, it is hoped that students' mastery of Indonesian and English can increase significantly, so that they are better prepared to face academic and professional challenges in the future.

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In conclusion, this research shows the need for improvements in language teaching at junior high school level, especially in developing student competence in Indonesian and English. By adopting balanced, innovative and practice-based learning strategies, it is hoped that students can master both languages well, which will ultimately support their success in academics and everyday life. Implementing the suggestions given requires strong collaboration between teachers, students and school officials to create a supportive and effective learning environment.

Student participation also needs to be increased by providing more opportunities to interact in English outside the classroom. Programs such as language clubs, speech competitions, or debates in English can be effective means of increasing students' confidence in using the language. This program not only provides opportunities for speaking practice, but also trains critical thinking and argumentation skills, which is beneficial for the development of their overall academic skills.

Based on these results, the recommendations proposed include increasing the frequency of use of English in oral activities in class, such as group discussions and daily conversation simulations. In addition, more contextual and interactive learning materials, such as videos or simulations, can increase students' interest and understanding of English. This research emphasizes the importance of a balanced approach in teaching Indonesian and English, as well as innovative learning methods to overcome student difficulties, especially in mastering English.

In practice, language learning at Trisakti 1 Medan Catholic Private Middle School combines various teaching methods to support effective learning. In class VII, Indonesian teachers tend to use interactive lecture methods, where students are encouraged to ask and answer questions related to the material being taught. Meanwhile, in teaching English, task-based learning methods are often used to provide opportunities for students to practice speaking, listening, reading and writing in English (Prayuda, Sinaga, et al., 2023).

The use of learning media such as videos, images and audio is also very helpful in introducing English to students. With this media, students can more easily understand the vocabulary and grammar that are introduced. In learning Indonesian, the use of literary texts such as short stories, poetry and news articles helps students hone their reading and writing skills well.

Apart from that, regular evaluations are also carried out to measure students' progress in mastering both languages. At Trisakti 1 Medan Catholic Private Middle School, evaluation does not only focus on writing skills, but also includes speaking and listening skills, especially in learning English. This is done to ensure that students not only understand theory, but are also able to apply the language in everyday communication contexts.

### CONCLUSION

The structure of using Indonesian and English in learning in class VII of the Trisakti 1 Catholic Private Middle School, Medan, emphasizes the importance of implementing an effective and comprehensive approach to facilitate a balanced understanding of both languages. In the context of language education, teachers play an important role in ensuring students not only learn grammatical rules, but are also able to use both languages in a variety of communicative situations, both spoken and written. To achieve this goal, a combination of traditional and innovative learning methods is needed that can accommodate students' diverse learning styles.

The use of traditional methods, such as direct instruction, can help in strengthening the basics of grammar and vocabulary. Meanwhile, innovative approaches, such as project-based learning, digital technology and interactive learning, are able to encourage students' active participation and provide practical experience in language. With this variety of methods, teachers can create a dynamic learning environment, where students feel encouraged to learn more actively and independently.

Apart from that, teachers need to provide input that can be understood (comprehensible input) that is appropriate to the level of ability and cognitive development



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of students. This includes using language that is appropriate to the context of students' daily lives, so that they can more easily understand and apply it. By introducing material gradually, starting from simple to more complex, students will be more confident in using both languages actively.

A conducive learning environment is also very important in the language learning process. Teachers need to create a supportive classroom atmosphere, where students feel safe to make mistakes and learn from these experiences. Positive reinforcement and constructive feedback are key in building student motivation to continue to develop in language mastery. Apart from that, interaction between students through discussions, language games, and conversation simulations can also improve language skills significantly.

Overall, with a combination of effective learning methods, appropriate input, and a supportive learning environment, Indonesian and English language teaching in class VII of Trisakti 1 Medan Catholic Private Middle School can run optimally. This will provide a strong foundation for students to master both languages and apply them in everyday life, both in academic and social environments.

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# IMPLEMENTATION OF DIGITAL NUMERATION METHOD TO IMPROVE STUDENTS' NUMERACY SKILLS AT SMP SWASTA JERISA MANDIRI MEDAN

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### **ABSTRACT**

This study confirms that the implementation of digital numeracy methods significantly improves students' numeracy skills at SMP Swasta Jerisa Mandiri Medan. Through a technology-based approach, students are not only able to understand basic mathematical concepts better, but also show increased interest and motivation in the learning process. The results of the analysis show that the application of interactive media, as part of this method, plays an important role in creating an interesting and exciting learning environment, so that students are more involved in learning activities. Furthermore, the positive relationship between the implementation of digital numeracy methods and students' numeracy skills indicates that the use of technology in education can be an effective solution to overcome learning difficulties experienced by students, especially in the subject of mathematics. In addition, the learning interest factor was shown to mediate the relationship between the two variables, indicating the importance of active student involvement in the learning process. Thus, digital numeracy methods not only function as learning aids, but also as a way to arouse students' enthusiasm for mathematics. Based on these findings, the study recommends that schools and other educational institutions consider integrating digital numeracy methods into their curriculum. Support in the form of training for teachers and increasing access to digital devices is also important to ensure the success of the implementation of this method. Overall, this research makes a significant contribution to the development of mathematics education in Indonesia, with the hope of improving the quality of education and students' numeracy skills in a sustainable manner.

Keywords: Digital Numeracy; Student Numeracy Skills; Digital Learning Methods

### INTRODUCTION

In today's digital era, developing numeracy literacy in students is one of the priorities in the world of education. Numeracy literacy, especially understanding basic mathematical concepts such as multiplication, is an important foundation that influences students' ability to absorb material at the next level of education (Rogowsky et al., 2018). Based on initial observation data, understanding the concept of multiplication is still a significant challenge at the elementary school level, which has the potential to hinder the learning process if not addressed. In addition, literacy culture also requires special attention, especially in reading activities that are still less popular with students (Purpura & Lonigan, 2013). This low interest in reading is caused by the perception that reading is a boring activity, as well as a lack of support from the environment, including from parents.

On the other hand, the introduction of educational games oriented towards numeracy literacy has been shown to have a positive impact on increasing students' interest in learning (Megawati & Sutarto, 2021). For example, through the Kampus Mengajar Program implemented at SD Negeri 13 Kota Sorong, students showed a significant increase in literacy and numeracy skills after being involved in educational games. This program is implemented in four stages: Situation Analysis or Partner Problem Study (Pre-Test), Preparation and



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Creation of Educational Games, Introduction of Educational Games, and Evaluation of Program Results (Post-Test). Based on the results of the pre-test and post-test on the Minimum Competency Assessment (AKM), it can be seen that there was an increase in literacy in 50% of students, while in numeracy as many as 56.25% of students experienced an increase after participating in the program.

In a broader context, this study will focus on "Implementation of Digital Numeration Method to Improve Students' Numeracy Skills at SMP Swasta Jerisa Mandiri Medan." With this background, this study aims to explore the effectiveness of the digital numeracy method in improving the numeracy skills of junior high school students. This method is expected to provide solutions to the challenges of numeracy learning and improve literacy culture through a more interactive approach and in accordance with technological developments. This digital numeracy method is expected to help students understand mathematical concepts more easily and interestingly, considering that technology has a strong appeal to the younger generation (Disney et al., 2019). With a digital-based approach, students can learn through interactive media that supports the visualization of basic mathematical concepts such as multiplication, division, and other arithmetic operations. In addition, the use of technology in numeracy learning is expected to be able to foster a higher interest in learning in students, reducing the perception that mathematics is a boring or difficult subject.

This program will be implemented with several strategic stages including student needs analysis, preparation of digital learning materials, training in the use of numeracy software, and evaluation of learning outcomes. Through a series of stages, it is hoped that students can experience significant improvements in their understanding and application of numeracy skills. Data from the pre-test and post-test will be analyzed to measure the level of effectiveness of this method on improving student learning outcomes, especially in numeracy skills.

Furthermore, this study will also look at external factors that can influence the effectiveness of digital numeracy learning, such as parental support, the availability of technological devices at home, and the student's learning environment at school. By understanding these factors, it is hoped that the digital numeracy method can be implemented more optimally and sustainably, not only at SMP Swasta Jerisa Mandiri Medan but also in other educational institutions (Sayekti & Sukestiyarno, 2021).

### RESEARCH METHOD

This study uses a quantitative approach with a quasi-experimental research design to measure changes in students' numeracy skills before and after the implementation of the digital numeracy method. The quasi-experimental method was chosen because it allows research to be conducted in a classroom environment that cannot be fully controlled strictly, but still provides comparative data. This design involves two groups, namely the experimental group that will receive the digital numeracy method intervention and the control group that will use the conventional numeracy learning method. With this design, the study can identify whether there are significant differences in numeracy learning outcomes between the two groups (Prayuda, 2020).

The research subjects consisted of grade VII students at SMP Swasta Jerisa Mandiri Medan who were selected using purposive sampling. The purposive sampling technique was used to ensure that the characteristics of the students who were the subjects of the study were in line with the required criteria, namely students who had challenges in basic numeracy literacy. The experimental group and control group will be selected randomly from several grade VII classes available at the school, taking into account the homogeneity of the initial numeracy ability levels of students based on the pre-test results (Prayuda, 2023).

The instruments used in this study include numeracy tests, observation sheets, and questionnaires. The numeracy test is compiled based on numeracy indicators relevant to the junior high school curriculum, which include basic arithmetic operation skills, understanding of basic mathematical concepts, and numeracy applications in the context of

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everyday life. Observation sheets are used to record the process of student interaction during learning with the digital numeracy method, especially to identify active participation, understanding of concepts, and student responses to the material presented. In addition, a questionnaire is given to explore students' perceptions and responses to the use of technology in numeracy learning, which is expected to provide a deeper picture of students' attitudes towards digital-based learning methods.

### **DISCUSSION**

In this chapter, the results of the research obtained from the implementation of the digital numeracy method at SMP Swasta Jerisa Mandiri Medan will be described and analyzed. Based on the data obtained from the pre-test, post-test, observation sheets, and questionnaires, the effectiveness of this method in improving students' numeracy skills will be discussed. This analysis will also discuss the significant differences between the experimental and control groups and the factors that influence students' acceptance of the digital numeracy learning method. This chapter describes the successes, challenges, and potential for further application of the digital numeracy method in numeracy learning in secondary schools. The pre-test results showed that most students in both groups, both experimental and control, had relatively low levels of numeracy skills. Based on the pre-test results, it was found that students had difficulty in basic mathematical operations such as multiplication, division, and the application of arithmetic concepts in story problems. These difficulties indicate an urgent need to implement more effective and interesting learning methods for students. In the experimental group, after the implementation of the digital numeracy method, there was a significant increase in the post-test score. In contrast, the control group that received the conventional learning method experienced a smaller increase in their post-test results. The difference in results shows that the digital numeracy method is able to provide a greater positive impact on improving students' numeracy skills compared to traditional learning methods.

The increase that occurred in the experimental group can be caused by the characteristics of the digital numeracy method which uses interactive and visual media (Setyo et al., 2024). This media helps students understand mathematical concepts concretely through simulations and educational games that stimulate a deeper understanding of the material. Overall, the increase in learning outcomes in the experimental group indicates that the digital numeracy method can be a solution to improve understanding of mathematical concepts, especially among students who have difficulty in mastering basic arithmetic operations.

The digital numeracy method relies on interactive software and applications designed to make it easier for students to understand numeracy concepts visually. These interactive media, such as animations and games, have been shown to attract students' interest and foster learning motivation. Based on the results of observations, students in the experimental group appeared more actively involved in the learning process, showing higher enthusiasm when interacting with digital media. This is in contrast to the control group which tended to be passive and showed lower interest in the conventional numeracy learning process.

Learning using interactive media also provides a more personal and adaptive learning experience. Students who understand concepts more quickly can proceed to higher levels of difficulty, while students who need more time can repeat simulations and exercises without pressure. These adaptive characteristics indicate that the digital numeracy method not only helps conceptual understanding but also provides space for students to learn according to their own pace and needs. The success of this method shows that a technology-based approach can meet diverse learning needs, especially in classes with high heterogeneity of abilities.

Based on the results and discussions that have been described, it can be concluded that the implementation of the digital numeracy method has succeeded in improving students' numeracy skills at SMP Swasta Jerisa Mandiri Medan. This method is not only effective in improving the understanding of basic mathematical concepts, but also

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successfully fosters students' interest and motivation to learn through interactive and visual media that are fun. The success of this method has important implications for the development of technology-based numeracy learning at the elementary and secondary education levels.

During the research process, I also observed that learning interest acts as a mediating factor that strengthens the relationship between digital numeracy methods and students' numeracy skills. When students feel more interested in this digital method, they tend to be more motivated to be actively involved in learning. From my perspective, this learning interest not only supports students' understanding of the material but also plays a major role in determining how far they improve. With an interesting and student-oriented method, learning interest becomes a catalyst that maximizes learning outcomes. This observation convinced me that technology-based teaching methods not only improve academic skills but are also able to change students' perceptions of mathematics. This learning interest factor proves that a learning approach designed to meet students' interests can provide more significant and lasting results.

In addition, this study shows that with the support of adequate facilities, teacher training, and access to technology, the digital numeracy method has the potential to be widely applied and provide a significant positive impact on mathematics education in Indonesia. However, to achieve more optimal results, further support is needed in terms of resources and curriculum development that is in line with technological developments.

This study has two main variables analyzed, namely the implementation of the digital numeracy method as an independent variable and students' numeracy skills as a dependent variable. Specifically, the independent variable in this study refers to the digital numeracy method used to improve students' numeracy skills through interactive media, such as educational game-based applications and numeracy visualization software. Meanwhile, students' numeracy skills which include the ability in basic mathematical operations, such as addition, subtraction, multiplication, and division, as well as understanding basic mathematical concepts act as variables influenced by the implementation of this method.

The results of the study showed a positive relationship between the implementation of digital numeracy methods and the improvement of students' numeracy skills. This is indicated by a significant increase in the post-test scores obtained by the experimental group compared to the control group. This increase indicates that the more intensively and effectively the digital numeracy method is implemented, the greater its influence on students' numeracy skills. This positive relationship is supported by observational data showing that students participating in the experimental group showed higher interest and involvement, factors that play a role in improving their numeracy skills.

### CONCLUSION

This research confirms that the implementation of digital numeration methods significantly improves students' numeracy skills at Jerisa Mandiri Medan Private Middle School. Through a technology-based approach, students are not only able to understand basic mathematical concepts better, but also show increased interest and motivation in the learning process. The results of the analysis show that the application of interactive media, as part of this method, plays an important role in creating an interesting and exciting learning environment, so that students are more involved in learning activities. Furthermore, the positive relationship between the application of digital numeracy methods and students' numeracy skills shows that the use of technology in education can be an effective solution to overcome learning difficulties experienced by students, especially in the subject of mathematics. In addition, the learning interest factor was proven to mediate the relationship between the two variables, indicating the importance of students' active involvement in the learning process. Thus, digital numeration methods not only function as learning aids, but also as a way to arouse students' enthusiasm for mathematics.

Based on these findings, the research recommends that schools and other educational institutions consider integrating digital numeracy methods in their curriculum. Support in

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the form of training for teachers and increasing access to digital tools is also important to ensure the successful implementation of this method. Overall, this research makes a significant contribution to the development of mathematics education in Indonesia, with the hope of improving the quality of education and students' numeracy skills in a sustainable manner.

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