

Teachers Strategy, Challenges on Pupils Numeracy Disciplines at the Intermediate Level

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Abstract—Numeracy is a critical foundation for academic success and everyday life, yet many students continue to face difficulties in mastering essential mathematical skills, particularly those affected by poverty. Addressing this concern, the present study, titled “Teachers’ Strategies and Challenges on Pupils’ Numeracy Disciplines at the Intermediate Level,”* aimed to determine the specific numeracy challenges faced by Grade 6 learners at Labuan Central School, Zamboanga City, for the school year 2024–2025. The research focused on assessing the extent of teachers’ teaching strategies in terms of instructional methods, assessment and feedback, and learners’ outcomes, as well as examining the correlation between these strategies and students’ mathematics proficiency. The study was limited to Grade 6 learners and did not extend to other grade levels or schools. A descriptive-correlational research design was employed, involving 96 learners selected through purposive sampling based on Gay’s (1997) recommendation. Data were collected using a researcher-adapted questionnaire, administered after obtaining the necessary approvals from education authorities. The findings revealed that although teachers applied diverse instructional approaches and provided assessments, learners continued to face challenges such as difficulty in understanding word problems, managing math-related anxiety, and keeping up with lesson pacing. A significant positive relationship was found between teachers’ strategies and students’ math proficiency. Based on these findings, the study recommends strengthening guided practice, improving feedback mechanisms, building learner confidence, adopting differentiated instruction, enhancing resources, providing continuous teacher development, and fostering a supportive learning environment to advance numeracy skills, especially for learners affected by poverty.

Index Terms—Numeracy, Teaching Strategies, Mathematics Proficiency, Learning Challenges, Intermediate Learners, Learning Poverty, Teacher Effectiveness, Student Performance, Word Problem Difficulties, Zamboanga City.

1. Introduction

Mathematics is regarded as a fundamental discipline that develops learners’ critical thinking, problem-solving skills, and logical reasoning abilities. At the core of mathematical learning lies numeracy the ability to understand, interpret, and apply mathematical concepts in both academic and real-life situations. Strong numeracy skills are essential not only for academic success but also for effective participation in an increasingly complex and data-driven society. Despite the importance of numeracy, many learners, particularly at the

intermediate level, continue to experience significant challenges in mathematics, affecting their overall academic performance and confidence. In the Philippine context, these challenges are often compounded by socio-economic factors such as poverty, limited access to learning materials, overcrowded classrooms, and insufficient parental support. These realities are especially evident in public schools, where resource limitations often hinder the effective implementation of teaching strategies intended to improve numeracy skills. Consequently, learners may develop negative attitudes toward mathematics, experience math anxiety, and struggle with essential components such as word problems, number sense, and logical reasoning. This study, titled “*Teachers’ Strategies and Challenges on Pupils’ Numeracy Disciplines at the Intermediate Level*,” seeks to investigate how teachers’ instructional methods, assessment practices, and feedback mechanisms influence the numeracy performance of Grade 6 learners at Labuan Central School in Zamboanga City. Specifically, the study explores the challenges learners face in numeracy disciplines, how these challenges affect their academic performance, and the extent to which teaching strategies contribute to addressing these difficulties. Given that Grade 6 serves as a critical transition point to high school, ensuring that learners acquire strong numeracy skills is essential for their continued academic success. However, school-based assessments have shown that many students remain below the expected proficiency levels in mathematics despite ongoing instructional efforts. Thus, this research aims to generate insights that will guide teachers, school leaders, and policymakers in enhancing teaching strategies, addressing learning gaps, and providing targeted interventions to support learners particularly those affected by poverty in achieving numeracy competence.

2. Literature

The development of numeracy skills among intermediate-level learners is strongly shaped by the quality and extent of teaching strategies applied by educators. In this regard, Hattie (2009), through a comprehensive meta-analysis of over 800 studies, emphasized that explicit instruction, clearly defined objectives, and continuous feedback are among the most effective approaches for improving mathematics achievement,

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particularly for students experiencing learning difficulties. This finding underscores the crucial role of teachers in implementing structured, evidence-based methods to enhance pupils' numeracy performance. Moreover, Shulman (1987) introduced the concept of Pedagogical Content Knowledge (PCK), stressing that teachers need both subject expertise and the ability to deliver mathematical concepts in accessible, engaging ways for diverse learners. Supporting this perspective, Boaler (2016) highlighted the importance of fostering a growth mindset through flexible, inquiry-based strategies that promote deep understanding rather than rote memorization—an approach particularly beneficial for learners from poverty-affected backgrounds who may lack academic support at home.

In addition, Slavin (1990) reinforced the value of cooperative learning, revealing that small-group collaboration significantly boosts engagement and academic outcomes, especially among disadvantaged students. Similarly, Black and Wiliam (1998) and Brookhart (2011) emphasized the transformative power of formative assessments and constructive feedback in improving mathematics learning. These assessments enable teachers to adapt instruction based on students' needs, fostering better comprehension and performance. Furthermore, Heritage (2010) asserted that integrating formative assessment throughout instruction encourages students to become active participants in their learning process, a practice especially vital for those from low-income families who often require additional academic support. In line with this, the National Council of Teachers of Mathematics (NCTM, 2014) advocated for equitable instruction and high expectations for all learners, thereby reinforcing the need for inclusive teaching practices.

Additionally, Darling-Hammond (2000) identified teacher quality—including experience, qualifications, and ongoing professional development—as a major factor influencing student success, even more so than class size or funding. Complementing this, UNESCO (2016) highlighted systemic challenges such as under-resourced schools, a shortage of qualified teachers, and overcrowded classrooms, all of which contribute to learning gaps in numeracy, particularly for students in poverty. Similarly, Ginsburg, Lee, and Boyd (2005) noted that cognitive, emotional, and environmental factors collectively shape numeracy development, with socio-economic disadvantages exacerbating these challenges. Furthermore, math anxiety plays a critical role in hindering learning; Todhunter (2021) explained that repeated failures and negative classroom experiences often lead to math anxiety, reducing both engagement and academic persistence. This aligns with the earlier work of Reyes (1984), who emphasized that students' motivation, self-efficacy, and attitudes toward mathematics significantly influence their learning outcomes—factors that are typically weaker among children from disadvantaged households.

Moreover, Marzano, Pickering, and Pollock (2001) provided empirical support that teaching strategies such as reinforcing student effort, providing frequent feedback, and using visual organizers enhance mathematics achievement. Consistent with this, Hanushek and Rivkin (2006) concluded that students from disadvantaged backgrounds experience the greatest benefits

from highly effective instruction, underscoring the importance of teacher competence in narrowing the numeracy achievement gap. Likewise, Ibe (2016) found that using varied and appropriate instructional materials simplifies complex mathematical concepts, making them more accessible to pupils. The use of visual and tangible teaching aids was shown to increase student engagement, comprehension, and problem-solving ability, particularly among learners from poverty-affected environments where traditional lecture-based methods often fall short. Finally, Boaler (2016) reiterated that boosting mathematical confidence and applying math to real-life situations are key to long-term success. Complementarily, Bernabeu *et al.* (2020) emphasized that understanding word problems is a critical challenge for students, often rooted in gaps in reading comprehension, problem representation, and connecting language with mathematical reasoning. Turning to the Philippine context, Tinio (2012) investigated instructional methods in rural schools, revealing that interactive teaching approaches—such as problem-solving and cooperative learning—significantly enhanced student engagement and numeracy skills compared to traditional lecture-based methods. Similarly, Salazar (2017) emphasized that constructivist teaching fosters greater understanding and achievement among public school students. Espiritu (2015) further confirmed that teacher quality directly influences mathematics performance, with effective teachers utilizing varied strategies, including visual aids, hands-on activities, and technology integration to foster better understanding, particularly for students from low-income families.

In the same vein, the role of assessment and feedback in improving numeracy was underscored by Santos (2014), whose study showed that regular, detailed feedback significantly improved students' performance in mathematics. De Guzman (2018) reinforced this, demonstrating that immediate, constructive feedback boosts students' self-efficacy and motivation to learn. Moreover, Serrano (2016) revealed that individualized support and scaffolded learning experiences lead to notable improvements in students' problem-solving abilities, particularly among underprivileged learners. However, Dela Cruz (2017) reported that Filipino intermediate students lag behind their Southeast Asian peers in mathematics proficiency, attributing this to inadequate learning resources, overcrowded classrooms, and inconsistent teacher training. Supporting this, Hernandez (2019) highlighted similar barriers such as poverty, lack of materials, and under-trained teachers as major factors hindering numeracy development. De Jesus (2018) additionally noted that high levels of math anxiety among low-income students significantly affect their academic performance, compounding these challenges.

Furthermore, Natividad (2015) emphasized the impact of socio-economic status, explaining that wealthier students benefit from tutoring and resources, while impoverished learners often struggle. In response, Gonzales (2014) found that teacher professional development focused on student-centered, active learning strategies substantially improved mathematics outcomes, especially in under-resourced schools. Likewise, Manalo (2016) stressed the link between motivation and

mathematics success, showing that students exposed to engaging activities and positive reinforcement performed better. Complementary to this, Cruz (2019) documented how low self-esteem, limited math exposure at home, and poor classroom conditions hinder numeracy development among low-income learners. Equally important, Santos and Ramos (2020) reported that schools with limited resources, such as teaching materials and textbooks, experienced lower student achievement in mathematics, emphasizing the urgent need for better resource allocation. Aguila (2016) also highlighted that personalized, reflective feedback effectively improved mathematical skills, especially for struggling students. Panganiban (2017) underscored the positive impact of parental involvement on student performance, even when resources are scarce, thus emphasizing the need for strong home-school partnerships in poverty-stricken areas. Similarly, Sison (2018) demonstrated that integrating educational technology, such as simulations and math games, enhanced student engagement and understanding, particularly in resource-limited schools.

In addition, Villanueva (2015) found that supportive teacher-student relationships and positive classroom environments significantly improved mathematics outcomes for students facing external stressors associated with poverty. Finally, Lara (2014) confirmed that effective school leadership, particularly in disadvantaged communities, motivates teachers, improves resource management, and contributes to enhanced student achievement in numeracy disciplines. Collectively, these studies highlight the complex interplay of teaching strategies, assessment practices, resource availability, and socio-economic factors in shaping numeracy outcomes, especially for learners confronting the challenges of poverty.

3. Scope and Delimitation

This study aims to identify the challenges experienced by Grade 6 learners in numeracy subjects within the environment of poverty at Labuan Central School for the academic year 2024–2025. It particularly explores the correlation between the level of teachers' teaching strategies—embracing instructional approaches, testing and giving feedback, and students' outcomes and development—and the learners' math competence. The research is only applied to Grade 6 learners, not other grade levels. The research focuses on learner and teaching issues in numeracy. Furthermore, study is restricted to Labuan Central School and does not seek to make results generalizable to other schools or education systems.

4. Methodology

A. Design

The study employs a Descriptive-Correlational Research Design to identify the challenges faced by intermediate-level learners in numeracy disciplines. Additionally, it will examine the teaching strategies used by teachers and assess the mathematics proficiency of the learners. Then, it determines the significant relationship between the extent of teacher's teaching strategy and student's mathematics proficiency.

B. Respondents of the Study

1) Sampling

Based on the population of the study, the researcher employed a non-random sampling technique to select respondents from the Grade 6 learners of Labuan Central School for the school year 2024–2025. To ensure a manageable and representative sample, the researcher followed Gay's (1997) recommendation that 20% of a population is appropriate for descriptive research resulting in a sample size of 96 learners.

2) Research Instrument

The research instrument was adopted from Domoloan (2020) and expanded by the current researcher. It consists of four parts with a total of 30 statements. The descriptive component measures the extent of the teacher's teaching strategies in terms of Instructional Methods, Assessment and Feedback, and Learners' Outcomes and Progress. A 4-point Likert scale was used to assess responses: (4) strongly Agree, (3) Agree, (2) Disagree, and (1) Strongly Disagree. To determine the relationship between the extent of the teacher's teaching strategies and the students' mathematics proficiency, the study utilized Pearson's Correlation Coefficient.

3) Data Gathering Procedure

To ensure the ethical and proper conduct of the study, the researcher followed a series of formal steps in the data gathering process. Initially, a letter of request was addressed and submitted to the Schools Division Superintendent of Zamboanga City, seeking approval to conduct the research entitled "Learning in Poverty: Pupil's Challenges on Numeracy Disciplines in Intermediate Level." Upon approval, a second letter of permission was prepared and submitted to the School Principal of Labuan Central School to formally request the conduct of the study within the school premises and to allow access to Grade 6 learners as respondents. After securing the necessary approvals, the researcher coordinated with the Grade 6 teachers to schedule the administration of the survey. On the agreed schedule, the researcher personally visited each Grade 6 classroom and distributed the survey questionnaires to the selected student-respondents. Before the survey began, the researcher clearly explained the purpose of the study, assured students of the confidentiality of their responses, and emphasized that participation was voluntary. The students were given 10 to 15 minutes to complete the questionnaire while remaining in their respective classrooms under the supervision of their classroom teachers and the researcher. After all completed forms were collected; the researcher thanked both the students and the teachers for their cooperation and support in the successful administration of the data collection process. This systematic procedure ensured that the data gathered was accurate, ethically obtained, and relevant to the objectives of the study.

5. Results and Discussion

This section presents and interprets the data from the respondents through the checklist. The data collected was based on the objectives of the study, tallied, analyzed, and interpreted using descriptive statistics

Table 1
The extent of teacher's teaching strategy in terms of instructional material

Statement Instructional material as a student...	Mean	Verbal Description
My teacher uses a variety of strategies to help me understand math concepts.	3.22	Agree
My teacher explains lessons clearly and in a way I can understand.	3.22	Agree
My teacher uses visual aids and materials to support instruction.	3.22	Agree
My teacher allows me to participate actively during math lessons.	3.22	Agree
My teacher provides enough examples before letting us practice on our own.	3.20	Agree
Over-all mean	3.22	Agree

Legend: 4.00 – 3.26 Strongly Agree, 3.25 – 2.51 Agree, 2.50 – 1.76 Disagree, 1.76 – 1.00 Strongly Disagree

Table 2
The extent of teacher's teaching strategy in terms of assessment and feedback

Statement Assessment and Feedback As a student...	Mean	Verbal Description
My teacher regularly gives quizzes or tests to check my understanding.	3.22	Agree
I receive feedback that helps me improve in math.	3.23	Agree
My teacher discusses the results of our assessments and explains our mistakes.	3.23	Agree
I know how well I am doing in math because of the feedback I receive.	3.22	Agree
My teacher gives me time to reflect on my performance and improve.	3.22	Agree
Over-all mean	3.22	Agree

Legend: 4.00 – 3.26 Strongly Agree, 3.25 – 2.51 Agree, 2.50 – 1.76 Disagree, 1.76 – 1.00 Strongly Disagree

Table 3
The extent of teacher's teaching strategy in terms of learners' outcomes and progress

Statement Learners' outcomes and Progress As a student...	Mean	Verbal Description
I can see improvements in my math performance over time.	3.35	Strongly Agree
I understand how to solve math problems better than before.	3.23	Agree
My teacher recognizes and encourages my progress.	3.23	Agree
I feel more confident in answering math questions.	3.22	Agree
I am able to apply what I learned in real-life situations.	3.22	Agree
Over-all mean	3.25	Agree

Legend: 4.00 – 3.26 Strongly Agree, 3.25 – 2.51 Agree, 2.50 – 1.76 Disagree, 1.76 – 1.00 Strongly Disagree

A. Problem 1. What is the Extent of Teacher's Teaching Strategy in Terms of: Instructional Methods, Assessment and Feedback and Learners Outcomes and Progress

Table 1 presents the extent of teachers' teaching strategies in terms of instructional materials within the context of numeracy disciplines at the intermediate level. The highest recorded mean is 3.22, which corresponds to the statement "My teacher uses a variety of strategies to help me understand math concepts," with a verbal interpretation of Agree. This indicates that teachers are applying diverse approaches in their teaching, supported by various instructional materials, to assist pupils in understanding mathematical concepts more effectively. The use of multiple strategies, such as visual aids, interactive activities, and concrete examples, helps make abstract numeracy topics more accessible to learners. This practice aligns with Ibe (2016), who emphasized that incorporating effective instructional materials and varied teaching techniques in mathematics lessons enhances student comprehension and promotes better academic performance. Conversely, the lowest mean is 3.20, obtained from the statement "My teacher provides enough examples before letting us practice on our own," which is still interpreted as Agree. Although the response is generally positive, the slightly lower mean suggests that some students may feel the examples provided by teachers are not always sufficient to fully prepare them for independent practice. This highlights an area where instructional strategies can still be improved, particularly by ensuring that enough demonstrations and guided examples are given to build learners' confidence before they engage in solving math problems independently. These findings underscore the importance of not only using a variety of instructional materials but also ensuring that examples and

guided practice are consistently provided to strengthen pupils' understanding of numeracy concepts.

Table 2 presents the extent of teachers' teaching strategies in terms of assessment and feedback in numeracy disciplines at the intermediate level. The highest recorded mean is 3.23, corresponding to the statement "I receive feedback that helps me improve in math," with a verbal interpretation of Agree. This suggests that pupils believe the feedback they receive from teachers contributes positively to their understanding and improvement in numeracy. Providing timely, specific, and constructive feedback allows learners to correct misconceptions and strengthens their mathematical skills, supporting Sadler's (1989) view that effective feedback is essential in guiding students toward academic improvement. On the other hand, the lowest mean is 3.22, which appears across several statements, including "My teacher regularly gives quizzes or tests to check my understanding" and "My teacher gives me time to reflect on my performance and improve," both interpreted as Agree. Although still positive, the slightly lower mean suggests that while assessments and opportunities for reflection are present, some learners feel these strategies could be more consistent or structured to maximize their impact on numeracy learning. These findings highlight the need to strengthen assessment practices and ensure regular, meaningful feedback reaches all pupils to support their progress.

Table 3 presents the extent of teachers' teaching strategies in terms of learners' outcomes and progress in numeracy disciplines at the intermediate level. The highest mean recorded is 3.35, corresponding to the statement "I can see improvements in my math performance over time," with a verbal interpretation of Strongly Agree. This suggests that most pupils perceive noticeable improvements in their mathematics performance,

Table 4
Student's mathematics proficiency

Statement	Student's mathematics proficiency As a student...	Mean	Verbal Description
I can solve basic math problems easily.		3.25	Agree
I understand the math topics taught in class.		3.23	Agree
I can explain how I solved a math problem.		3.22	Agree
I often get high scores in math assessments.		3.22	Agree
I am confident in my math skills.		3.21	Agree
Over-all mean		3.23	Agree

Legend: 4.00 – 3.26 Strongly Agree, 3.25 – 2.51 Agree, 2.50 – 1.76 Disagree, 1.76 – 1.00 Strongly Disagree

Table 5
Challenges faced in numeracy disciplines

Statement	Challenges Faced in Numeracy Disciplines As a student...	Mean	Verbal Description
I find it hard to understand word problems.		3.33	Strongly Agree
I get nervous or anxious when solving math problems.		3.25	Agree
I don't have enough learning materials for math.		3.23	Agree
I struggle to do homework or assignments in math.		3.23	Agree
I find math lessons too fast or too difficult to follow.		3.22	Agree
Over-all mean		3.25	Agree

Legend: 4.00 – 3.26 Strongly Agree, 3.25 – 2.51 Agree, 2.50 – 1.76 Disagree, 1.76 – 1.00 Strongly Disagree

indicating the effectiveness of teachers' strategies in supporting academic growth over time. This aligns with Hattie (2009), who emphasized that visible improvements in student performance serve as strong motivators for learners and reflect the success of evidence-based teaching strategies. Meanwhile, the lowest mean is 3.22, observed in two statements: "I feel more confident in answering math questions" and "I am able to apply what I learned in real-life situations," both with a verbal interpretation of Agree. Although positive, these scores indicate that students have slightly lower confidence and face challenges in applying mathematical concepts to practical situations. Boaler (2016) pointed out that developing mathematical confidence and real-world application of skills requires consistent encouragement, relevant activities, and opportunities for learners to connect classroom knowledge to everyday life. The overall mean is 3.25, verbally interpreted as Agree, suggesting that teachers' strategies generally contribute to positive learning outcomes and progress in numeracy, though some areas—particularly confidence-building and real-world application—still need improvement. In conclusion, the findings reveal that while teachers' strategies are effective in enhancing learners' mathematics performance and understanding, strengthening their confidence and ability to apply skills outside the classroom remains essential for more comprehensive numeracy development.

B. Problem 2: What is the Student's Mathematics Proficiency?

Table 4 presents the assessment of students' math proficiency based on their self-perceptions in numeracy disciplines. The highest mean recorded is 3.25, corresponding to the statement "I can solve basic math problems easily," with a verbal interpretation of Agree. This indicates that most learners feel capable of solving basic math problems, reflecting foundational proficiency in mathematics. This suggests that teaching strategies implemented by educators are effectively helping students master basic mathematical operations, which are essential for building higher-order skills. According to Hattie (2009), student success in foundational tasks significantly enhances motivation and serves as a stepping stone for improved academic performance. On the other hand, the lowest mean is 3.21, reflected in the statement "I am confident in my

math skills," with a verbal interpretation of Agree. Though still positive, this slightly lower mean indicates that while students feel generally capable, they lack full confidence in their overall mathematical abilities. This highlights the need for teachers to implement strategies that not only improve skills but also boost self-confidence. Boaler (2016) emphasized that fostering mathematical confidence is key to students' willingness to engage with challenging tasks and persist in problem-solving, which directly influences their academic outcomes. The overall mean is 3.23, interpreted as Agree, suggesting that students perceive themselves as having a satisfactory level of math proficiency. The implication is that while teaching strategies support students in developing basic math skills, there remains a need to focus on strengthening learners' confidence and ability to explain and apply mathematical concepts. In conclusion, the general findings reveal that students demonstrate moderate proficiency in mathematics, particularly in solving basic problems and understanding math topics. However, building their confidence remains essential to fully enhance their mathematical performance and academic success.

C. Problem 3: What are the Challenges Faced by Learners in Numeracy Disciplines?

Table 5 presents the challenges encountered by learners in numeracy disciplines at the intermediate level. The highest mean is 3.33, corresponding to the statement "I find it hard to understand word problems," with a verbal interpretation of Strongly Agree. This indicates that a significant number of pupils experience difficulty when solving word problems, which is a critical component of mathematics as it requires comprehension, logical reasoning, and application of mathematical operations. The implication of this finding is that despite teaching strategies, many learners still struggle with connecting mathematical concepts to real-life scenarios, which affects their overall numeracy performance. According to Bernabeu et al. (2020), difficulties with word problems often stem from gaps in reading comprehension and conceptual understanding, underscoring the need for integrated literacy and numeracy approaches. The lowest mean is 3.22, noted in the statement "I find math lessons too fast or too difficult to follow," with a verbal interpretation of Agree. Although this

Table 6

		Teacher Teaching Strategies	Mathematics Proficiency	Interpretation
Teacher Teaching Strategies	Pearson Correlation	1	1.000**	
	Sig (2-tailed)		.000	Significant
	N	96	96	
Mathematics Proficiency	Pearson Correlation	1.000**	1	
	Sig (2-tailed)	.000		Significant
	N	96	96	

still reflects a generally positive response, it highlights that some students feel overwhelmed by the pacing or complexity of lessons. This suggests a need for differentiated instruction to address varied learning speeds and abilities within the classroom. Boaler (2016) emphasized that effective mathematics teaching requires pacing that accommodates all learners, fostering an inclusive environment where students can process and master concepts at their own pace. The overall mean is 3.25, with a verbal interpretation of Agree, indicating that, on average, learners acknowledge facing notable challenges in numeracy disciplines. The implication is that while students generally cope with math, key areas such as understanding word problems, managing anxiety, and keeping up with lesson pacing remain significant barriers to learning. In conclusion, the general findings reveal that learners face moderate challenges in numeracy disciplines, with understanding word problems being the most pressing difficulty. Addressing these challenges through improved instructional strategies, integration of literacy skills and adjustments in lesson pacing is essential to support learners' overall progress in mathematics.

D. Problem 4. Is there a Significant Relationship Between the Extents of Teacher's Teaching Strategy and Mathematics Proficiency?

Table 6 presents the result of the Pearson correlation analysis to determine the relationship between the extent of teachers' teaching strategies and pupils' mathematics proficiency. The computed Pearson correlation coefficient is 1.000, indicating a perfect positive correlation, while the p-value is .000, which is lower than the 0.05 significance level. This result confirms that there is a statistically significant relationship between the two variables. The perfect positive correlation means that as teachers improve their teaching strategies, there is a direct and corresponding improvement in learners' mathematics proficiency. This finding aligns with Hattie's (2009) research, which emphasizes that effective teaching strategies strongly influence student achievement, particularly in numeracy. Furthermore, Boaler (2016) explained that adopting innovative, student-centered, and engaging approaches enhances students' mathematical understanding and confidence, contributing to better academic performance. In conclusion, the results indicate that enhancing teachers' teaching strategies plays a crucial role in improving pupils' numeracy proficiency. Therefore, continuous efforts to strengthen instructional methods are essential in addressing challenges and promoting higher mathematics performance among learners.

6. Conclusion

Based on the findings, the researcher concludes that:

1. Teachers from Labuan Central School are utilizing

different instructional methods; including visual aids, clear explanations, and opportunities for student participation, which help make mathematical concepts more accessible to learners. However, despite these efforts, the findings reveal that some students still feel unprepared when expected to solve problems independently, indicating a need for more consistent guided practice before allowing students to work on their own.

2. Assessment and feedback practices are evident in the classrooms and are perceived by students as helpful tools for improving their math performance. Regular quizzes, tests, and constructive feedback allow students to monitor their learning progress and address areas of weakness. Yet, despite these measures, there remains room for improvement in terms of providing more individualized and timely feedback, as well as opportunities for reflection to help students better understand their progress and learning gaps.
3. Students recognize that their math performance has improved over time, which reflects positively on the effectiveness of teachers' strategies. However, the findings also indicate that students still experience a lack of confidence when answering math questions and struggle to apply mathematical concepts to real-life situations. These challenges suggest that while instructional practices contribute to academic improvement, more emphasis is needed on confidence-building activities and lessons that promote practical application of numeracy skills beyond the classroom.
4. The study established a significant relationship between the extent of teachers' teaching strategies and students' mathematics proficiency. This finding confirms that as teachers enhance their instructional methods, provide better assessments, and offer meaningful feedback, students' mathematical performance also improves. Nonetheless, despite these positive results, learners still face considerable challenges in numeracy, particularly in understanding word problems, dealing with math anxiety, and coping with the fast pace or difficulty of lessons. Therefore, continuous enhancement of teaching strategies, along with targeted interventions to address students' specific difficulties, remains essential to improving numeracy outcomes, especially for learners in poverty-affected communities.

7. Recommendations

In light of the findings and conclusions of this study, the following recommendations are proposed to enhance teaching strategies and improve learners' numeracy performance,

particularly for students facing challenges linked to poverty:

1. *Strengthen Guided Practice and Use of Instructional Materials*: Teachers should provide more guided examples and demonstrations before allowing learners to engage in independent practice. Ensuring that students fully understand the process through step-by-step examples will help build their confidence in solving mathematical problems. The use of varied, interactive instructional materials, such as visual aids, manipulative, and real-life problem scenarios, is also recommended to make abstract numeracy concepts more concrete and relatable.
2. *Enhance Assessment and Feedback Practices*: It is recommended that teachers provide timely, specific, and constructive feedback after every assessment to guide students' improvement. Opportunities for reflection should be incorporated regularly, allowing learners to assess their understanding and correct misconceptions. Moreover, assessment practices should be structured in a way that accommodates the varied learning needs of students, ensuring no learner is left behind.
3. *Promote Confidence-Building and Practical Application of Math Skills*: Teachers are encouraged to implement classroom activities that boost students' confidence in mathematics, such as collaborative problem-solving, peer tutoring, and positive reinforcement strategies. Lessons should also incorporate real-life applications of mathematical concepts to help students connect their learning to practical situations, which can foster deeper understanding and increase motivation.
4. *Address Specific Numeracy Challenges through Differentiated Instruction*: Given the significant difficulties learners face in understanding word problems and keeping up with lesson pacing, teachers should adopt differentiated instruction techniques. This includes breaking down complex problems into manageable steps, integrating literacy strategies to enhance comprehension, and adjusting lesson pacing to accommodate diverse learning abilities within the classroom.
5. *Provide Additional Learning Support and Resources*: The school administration should ensure that adequate learning materials and resources are available to support numeracy education, especially for students from economically disadvantaged backgrounds. Where possible, remedial classes, tutoring programs, and access to technology-based learning tools should be offered to provide additional academic support.
6. *Continuous Professional Development for Teachers*: Teachers should engage in ongoing professional development focused on innovative and student-centered teaching strategies, particularly those that enhance numeracy skills and address the unique challenges of learners in poverty. Workshops, training sessions, and peer-sharing opportunities will equip

teachers with new approaches to improve student engagement and performance in mathematics.

7. *Foster a Supportive and Inclusive Learning Environment*: Creating a positive classroom atmosphere where learners feel safe, supported, and respected is essential. Teachers and school leaders should work collaboratively to reduce math anxiety, promote a growth mindset, and encourage students to embrace mistakes as part of the learning process, especially for those struggling with numeracy. By implementing these recommendations, teachers, school administrators, and education stakeholders can better address the numeracy challenges faced by intermediate-level learners, ultimately improving mathematics proficiency and reducing learning gaps, particularly for students affected by poverty.

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