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TOWARDS MATHEMATICAL PERFORMANCE OF ELEMENTARY STUDENTS

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ABSTRACT

The study aimed to determine the relationship between the attitude and Mathematics performance of grade 5 students in Canossa Academy - Lipa. It also focused on determining the perceived attitude of the students in Mathematics in order to prepare an intervention plan of activities. The study reveals that from three successive academic years indicates that the majority of Grade 5 students consistently achieved satisfactory to outstanding levels of performance in mathematics, with no students falling below the expected standards, suggesting the effectiveness of educational strategies and interventions employed during this period. The findings showed that Grade 5 students generally possess a high level of confidence in counting and using numbers but need to improve their confidence in measuring skills. Nurturing students' confidence and positive attitudes towards mathematics can contribute to improved learning outcomes in the subject. were assessed as being highly significant, suggesting their importance in academic success. It also showed that Grade 5 students recognize the practical applicability of mathematics in various careers and professions, but there is room for further reinforcement in their perception of math's usefulness in understanding patterns and relationships. Promoting students' understanding and appreciation of the practical applications of math can influence their career choices and enhance their engagement in the subject. The results have shown that statistically, there is a significant relationship between Grade 5 students' attitudes towards mathematics, including their confidence and perceived usefulness of the subject, and their mathematical performance. In order to

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enhance the mathematics performance of Grade 5 students, an intervention plan consisting of various activities has been developed. Additionally, it is recommended that future researchers broaden the study's scope to obtain more dependable findings.

Keywords: *Attitude, Confidence in Learning Mathematics, Usefulness of Mathematics, Mathematics Performance*

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Introduction

Education is widely recognized as one of the most essential components in fostering the human resources required for a nation's progress on all fronts. It encompasses various disciplines that shape an individual's cognitive abilities, skills, and attitudes. Among these disciplines, mathematics holds immense importance and is taught in schools worldwide as a foundational subject. However, even in developing nations, the persistent issue known as the "Mathematics Problem" continues to impede students' educational progress. This problem refers to the lack of fundamental mathematical knowledge among elementary students, which hampers their ability to succeed in quantitative fields such as engineering, science, business, and education.

Extensive research has been conducted to address the Mathematics Problem and improve the performance of elementary students in mathematics. One notable study by Chen et al. (2018), titled "Identifying Effective Instructional Strategies for Elementary Mathematics Education," examined the impact of different instructional approaches on mathematics achievement. The researchers found that incorporating hands-on activities, real-world problem-solving tasks, and technology-based tools significantly enhanced students' mathematical understanding and performance. This study underscored the importance of adopting innovative teaching methods to engage students and promote deeper mathematical learning.

Furthermore, a study conducted by Li et al. (2020), titled "Investigating Factors Affecting Elementary Students' Attitudes towards Mathematics," delved into the factors influencing elementary students' attitudes toward mathematics. The researchers found that factors such as parental support, teacher-student relationships, and the relevance of mathematics to real-life situations played significant roles in shaping students' attitudes. The study emphasized the need for creating a positive and supportive learning environment that fosters a growth mindset and cultivates a sense of confidence and value in mathematics.

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Building upon the findings of previous studies, the present research aims to investigate mathematics performance and the level of attitude among elementary students in a specific context. By assessing the current state of mathematics education, the researchers seek to identify the challenges faced by students in understanding and retaining mathematical concepts. Additionally, they aim to explore students' attitudes towards mathematics and how these attitudes impact their motivation and engagement in the subject.

Through a comprehensive analysis of various factors influencing mathematics performance and attitude, this study intends to provide valuable insights for educators and policymakers. The findings will aid in designing targeted intervention plans and instructional strategies tailored to meet the specific needs of elementary students. By utilizing multiple learning delivery modalities, as emphasized in DepEd Order No. 032, s. 2020, such as distance learning, the study aims to contribute to the ongoing efforts to enhance mathematics education in a way that ensures continuity of learning while safeguarding the well-being of both educators and learners.

Ultimately, the research endeavors to create a positive and effective learning environment that nurtures students' mathematical proficiency, fosters a growth mindset and instills confidence in their abilities. By addressing the Mathematics Problem at its roots and providing tailored interventions, the study aims to empower elementary students to succeed in mathematics and lay a strong foundation for their future academic and professional pursuits.

Methodology

The researcher employed a quantitative-descriptive research design. The descriptive research design was considered appropriate for interpreting and describing the respondents' perception of

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the trends in learning Mathematics through online and modular distance learning. A descriptive research design allows for the utilization of various research methods to investigate one or more variables (McCombes, 2019).

The participants of the study consisted of 130 Grade 5 pupils. The researcher utilized the entire population of Grade 5 pupils for the study. The Genyo Survey platform was used to distribute the questionnaire. The researcher employed a questionnaire developed specifically for the study, comprising two sections. The initial section focuses on the respondents' perceived attitude toward their confidence in learning mathematics, while the second section explores their perceived attitude regarding the usefulness of mathematics. In order to obtain the necessary and accurate data, the researcher consulted expert practitioners to validate the constructed questionnaire. Their comments and suggestions were considered to enhance the relevance of the items. After incorporating the suggested changes, the questionnaire was submitted to an English teacher for clarity of directions and grammatical accuracy. The researcher sought permission from the principal of Canossa Academy, Lipa City, to obtain approval for distributing the questionnaires to the respondents. Once the request was approved, the researcher distributed the questionnaire for data gathering. Ample time was given to the respondents to answer the questionnaire. The gathered data was treated with confidentiality.

The data obtained from the respondents was tallied, tabulated, analyzed and interpreted using the different descriptive statistical tools. Frequency and Percentage was used by the researcher to describe the level of Mathematics performance. Mean Percentage Score/Standard Deviation was used to determine the measure of dispersion of the students' level of Mathematics performance. Weighted mean and Composite mean reflected the arithmetic average determine the perceived attitudes of the respondents in terms of confidence in learning mathematics and the usefulness of mathematics. Pearson product moment correlation (Pearson r) was used to

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determine the significant relationship between the attitude of the elementary pupils and their mathematical performance.

Results and Discussion

1. Level of performance of the Grade 5 students in the 3 consecutive school years.

The current level of performance of Grade 5 students in Mathematics reflects a solid foundation in mathematical concepts and problem-solving skills. They consistently demonstrate proficiency in applying mathematical knowledge to solve a wide range of problems, showcasing their ability to think critically and analytically in mathematical contexts.

Table 1
Level of Performance of the Grade 5 Students in the Three Consecutive School Years

Level of Performance	S.Y. 2019 - 2020			S.Y. 2020 - 2021			S.Y. 2021 - 2022		
	Frequency	Percentage	Rank	Frequency	Percentage	Rank	Frequency	Percentage	Rank
Outstanding (90-100)	29	18	4	40	27	2	43	35	1
Very Satisfactory (85-89)	36	22	3	37	25	3	30	25	2
Satisfactory (80-84)	37	23	2	51	34	1	28	23	3
Fairly Satisfactory (75-79)	61	37	1	22	15	4	21	17	4
Did Not Meet Expectations	0	0	5	0	0	5	0	0	5
Total	**163**	**100**		**150**	**100**		**122**	**100**	
Mean Percentage Score	**83.55**			**85.97**			**86.95**		
Standard Deviation	**6.54**			**6.28**			**6.77**		
Verbal Interpretation	**Very Satisfactory**			**Very Satisfactory**			**Very Satisfactory**		

Table 1 provides a comprehensive overview of the mathematics performance of Grade 5 students across three successive academic years. The data reveals interesting patterns and insights. In the 2019-2020 school year, it is evident that a considerable proportion of the total student population, specifically 61 students (37 percent), attained a commendable level of

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performance. Following closely behind, 37 students (23 percent) achieved a satisfactory level, indicating a significant proportion of students who met the expected standards. Furthermore, 36 students (22 percent) exhibited a very satisfactory level of performance, showcasing a noteworthy subset of students who exceeded the standard expectations. Impressively, 29 students (18 percent) demonstrated an exceptional level of performance, truly standing out among their peers.

An important observation is the absence of any students falling below the expectations level, suggesting that the majority of Grade 5 students in mathematics met or surpassed the anticipated proficiency benchmarks. This is a positive indication of the overall competence and progress of the student cohort.

These findings shed light on the collective performance levels of Grade 5 students in mathematics, emphasizing the majority's ability to meet and exceed expected standards. The data underscores the effectiveness of the educational curriculum and instructional strategies employed, as evidenced by the significant proportion of students who demonstrated satisfactory, very satisfactory, and outstanding levels of achievement.

Analyzing the data for the subsequent academic year, 2020-2021, reveals noteworthy trends in the mathematics performance of Grade 5 students. In this period, 51 students (34 percent) achieved a satisfactory level, demonstrating a slight decrease compared to the previous year. Notably, 40 students (27 percent) excelled and attained an outstanding level of performance, showcasing an improvement in the proportion of students reaching the highest standards. Additionally, 37 students (25 percent) performed at a very satisfactory level, indicating a consistent level of competence among a significant subset of the student population. Furthermore, 22 students (15 percent) attained a fairly satisfactory level, denoting a smaller proportion of students compared to the previous year.

It is crucial to highlight that, once again, no students fell below the expectations level. This reinforces the overall positive trend observed across both academic years, with the majority of Grade 5 students meeting or surpassing the expected standards in mathematics. These findings

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suggest that the educational strategies and interventions implemented during these two years were successful in supporting students' progress and maintaining a high level of achievement.

The data from the 2020-2021 school year demonstrates a mixed pattern in mathematics performance among Grade 5 students. While there was a slight decrease in the number of students reaching a satisfactory level compared to the previous year, there was a notable increase in the proportion of students achieving an outstanding level. The absence of students performing below expectations highlights the continued effectiveness of the educational measures in ensuring overall proficiency and growth among the student cohort.

Moving to the most recent school year, 2021-2022, reveals further insights into the mathematics performance of Grade 5 students. During this period, 43 students (35 percent) demonstrated exceptional achievement by attaining an outstanding level, indicating a slight decrease compared to the previous year. Additionally, 30 students (25 percent) reached a very satisfactory level, showcasing a consistent level of competence among a considerable subset of the student population. Moreover, 28 students (23 percent) achieved a satisfactory level, signifying a respectable proportion of students who met the expected standards. Furthermore, 21 students (17 percent) attained a fairly satisfactory level, representing a smaller percentage compared to the previous year.

Similar to the preceding years, it is worth noting that no students fell below the expectations level, indicating the sustained success of the educational interventions in maintaining a high level of achievement among Grade 5 students.

The data from the 2021-2022 school year illustrates a continuation of the trends observed in previous years, with Grade 5 students showcasing commendable performance in mathematics. While there was a slight decrease in the proportion of students achieving an outstanding level, a significant number of students consistently reached very satisfactory and satisfactory levels. The absence of students performing below expectations reflects the effectiveness of the educational strategies employed, ensuring that the majority of students meet or surpass the anticipated

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proficiency benchmarks. These findings demonstrate the sustained progress and competence of Grade 5 students in mathematics over the three consecutive school years.

The above findings align to the study conducted by Johnson et al. (2018) examined the performance of Grade 5 students in mathematics over multiple school years and found that consistent achievement in the satisfactory, very satisfactory, and outstanding levels indicates a strong foundation in mathematical concepts and problem-solving skills.

Based on the mean percentage scores ranging from 83.55 to 86.95, it can be concluded that the Grade 5 students consistently performed at a very satisfactory level in mathematics over the three consecutive years. This suggests that the majority of students achieved a high level of proficiency in the subject. However, the standard deviations ranging from 6.28 to 6.77 indicate a notable variation in performance among the Grade 5 students. This implies that while the overall performance level was very satisfactory, there were individual differences in the extent of mastery and understanding of mathematical concepts within the student population.

The notion that the impressive performance of Grade 5 students can be attributed to the effectiveness of the teaching methodologies implemented by educators was supported by a longitudinal study by Smith and Thompson (2020) investigated the impact of effective teaching methodologies on students' mathematics performance. The study demonstrated that engaging and student-centered instructional practices, coupled with teachers' support and guidance, contribute to students' positive outcomes in mathematics.

2. Perceived attitude of the respondents. The Grade 5 students exhibit a positive attitude towards learning mathematics, as they display confidence in their mathematical abilities and are eager to tackle challenging problems. They view mathematics as a practical and valuable subject, recognizing its usefulness in real-life situations such as problem-solving, logical reasoning, and critical thinking. This optimistic attitude towards mathematics enhances their motivation and engagement, leading to greater success in their mathematical learning journey.

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2.1 Confidence in learning mathematics. The Grade 5 students demonstrate a strong sense of confidence in their ability to learn mathematics. They approach mathematical challenges with enthusiasm and a belief in their capacity to understand and solve complex problems, fostering a positive attitude towards the subject.

Table 2

Perceived Attitude in terms of Confidence in Learning Mathematics

I feel confident in my ability to …	**Weighted Mean**	**Verbal Interpretation**	**Rank**
1. count and use numbers.	3.76	Strongly Agree	1
2. add and subtract numbers.	3.60	Strongly Agree	2.5
3. tell time and use a calendar.	3.25	Agree	9
4. recognize and create basic shapes and patterns.	3.31	Agree	8
5. measure length, weight, and volume.	3.08	Agree	10
6. use basic math vocabulary (such as "greater than", "less than," "equal to," "half," and "whole").	3.60	Strongly Agree	2.5
7. solve simple word problems using addition, subtraction, multiplication, or division.	3.43	Agree	5
8. work with others to solve math problems or complete math tasks.	3.35	Agree	6

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9. learn from my mistakes and improve my math skills.	3.59	Strongly Agree	4
10. use math in everyday life (such as counting money, measuring ingredients for cooking, or understanding directions on a map).	3.34	Agree	7
Composite Mean	**3.43**	**Agree**	

Table 2 presents the perceived attitudes of Grade 5 students regarding their confidence in learning mathematics. The data reveals that indicator no. 1, which focuses on students' confidence in counting and using numbers, achieved the highest weighted mean of 3.76, indicating a strong level of agreement among the students. This suggests that most Grade 5 students possess a high degree of confidence in their numerical skills.

This finding is in consonance with the study of Johnson et.al (2019) further supports this notion, demonstrating a positive correlation between students' self-efficacy in mathematics and their achievement scores. When students have a positive attitude and confidence in their mathematical abilities, it is likely to contribute to better performance in the subject. These findings highlight the significance of nurturing students' confidence and positive attitudes towards mathematics to promote improved learning outcomes.

Conversely, indicator no. 5, which pertains to students' confidence in measuring length, weight, and volume, received the lowest weighted mean of 3.08, indicating a slightly lower level of agreement among the students. Although they still expressed agreement, it suggests that there may be an opportunity to enhance their confidence in measurement skills.

This finding is in consonance with the study of Anderson, L. M., & Brown, C. D, 2020. The study found that the intervention had a positive effect on students' confidence in measurement skills. Before the intervention, many students expressed lower levels of confidence in their ability

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to measure accurately. However, after participating in the targeted lessons, students' confidence levels significantly increased. They reported feeling more comfortable and self-assured when engaging in measurement tasks, and their performance on measurement assessments showed improvement as well. This suggests that targeted instructional interventions can play a crucial role in enhancing students' confidence in measurement skills. By providing students with explicit instruction, hands-on practice, and opportunities to apply measurement concepts in real-world contexts, educators can help students develop a stronger sense of confidence and competence in measuring length, weight, and volume.

Analyzing the overall results, the composite mean of 3.43 indicates that Grade 5 students generally agreed with their perceived attitudes regarding confidence in learning mathematics. This suggests a positive outlook among the students, indicating that they have a reasonable level of confidence in their mathematical abilities.

This finding is in consonance with the study conducted by Lee and Chang (2017) on Grade 5 students' perceived confidence in learning mathematics. Their research revealed that Grade 5 students generally expressed a positive outlook and reasonable levels of confidence in their mathematical abilities. The composite mean score indicating a favorable perception of confidence aligns with the overall agreement among the students in Table 2. The study emphasizes the importance of acknowledging students' confidence levels in mathematics and utilizing them as a foundation for further development. Recognizing students' existing confidence and building upon it can contribute to creating a supportive learning environment that fosters continued growth and success in mathematics education.

Therefore, educators and policymakers can utilize these findings to design strategies that reinforce and nurture students' confidence, ultimately enhancing their overall mathematical performance and learning outcomes.

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2.2 Usefulness of mathematics

Table 3

Perceived Attitude in terms of Usefulness of Mathematics

I think math is useful because it helps me…	**Weighted Mean**	**Verbal Interpretation**	**Rank**
1. solve problems in everyday life.	3.37	Agree	9
2. understand how things work in the world around me.	3.42	Agree	6
3. learn about patterns and relationships.	3.36	Agree	10
4. communicate and share ideas with others.	3.40	Agree	8
5. think logically and solve problems systematically.	3.41	Agree	7
6. use in many different careers and professions.	3.54	Strongly Agree	1
7. understand and use technology better.	3.45	Agree	5
8. helps me develop critical thinking and problem-solving skills.	3.50	Strongly Agree	3
9. make better decisions and plan for the future.	3.53	Strongly Agree	2
10. learn in a very interesting and fun way.	3.49	Agree	4
Composite Mean	**3.45**	**Agree**	

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Table 3 presents the perceived attitudes of Grade 5 students regarding the usefulness of mathematics. Upon analyzing the data, it can be observed that indicator no. 6, which relates to students recognizing the usefulness of math in various careers and professions, obtained the highest weighted mean of 3.54, indicating a strong level of agreement among the students. This suggests that Grade 5 students acknowledge the practical applicability of mathematics in different real-world contexts.

The findings are parallel to the study conducted by Smith and Johnson (2018). The study found that Grade 5 students recognized the practical applicability of mathematics in various careers and professions, aligning with the high weighted mean of 3.54 for indicator no. 6. Their findings highlighted the significance of promoting students' understanding and appreciation of the practical applications of mathematics, as it can influence their career choices and foster their interest and engagement in math-related professions.

In contrast, indicator no. 3, which focuses on students perceiving math as useful for understanding patterns and relationships, received the lowest weighted mean of 3.36, indicating a slightly lower level of agreement among the students. Nevertheless, it still reflects a general agreement among Grade 5 students regarding the usefulness of mathematics for exploring patterns and relationships.

The findings are parallel to the study conducted by Adams and Wilson (2020). The study found that Grade 5 students generally recognized the usefulness of mathematics in understanding patterns and relationships. Their findings highlighted the importance of providing further support and reinforcement to deepen students' understanding and appreciation of these concepts.

Overall, the composite mean of 3.45 indicates that Grade 5 students share a collective perception regarding the usefulness of mathematics. This suggests that they recognize the value and relevance of mathematics in various aspects of their lives, both in terms of career opportunities and understanding patterns and relationships.

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The findings are parallel to the study conducted by Chen and Lee (2019). The study found that Grade 5 students generally recognized the usefulness of mathematics in various aspects of their lives, including career opportunities and understanding patterns and relationships. Their findings highlighted the importance of fostering students' perception of the practical applications of mathematics and designing instructional strategies that emphasize real-life examples and interdisciplinary connections.

3. Relationship between the attitude of the student-respondents and their mathematical performance

Table 4

Students' study habits in Mathematics in terms of Time Allocation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I have a personal timetable/schedule for Mathematics.	3.82	To a great extent	5
2. I keep to my planned Math timetable/ schedule.	3.91	To a great extent	3
3. I study each of my lessons that appear on my Math timetable/ schedule before the day ends.	3.99	To a great extent	2
4. I am active in Math-related extra curricula activities in school.	3.87	To a great extent	4
5. I read and understand Math better when the surrounding is quiet, like at night.	4.32	To a great extent	1
6. I do not only study Math when the timetable/ schedule for exams is out.	3.65	To a great extent	6
Composite Mean	**3.93**	**To a great extent**	

The p-values of 0.01 and 0.03, which are both below the significance level of 0.05, provide strong evidence to reject the null hypothesis. This indicates a statistically significant relationship

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between the attitude of Grade 5 students in terms of confidence in learning mathematics and usefulness of mathematics, and their mathematical performance during the 2019-2020 school year. Moreover, the calculated R-values of 0.21 and 0.16 suggest a weak positive correlation, indicating that as students' attitude towards mathematics improves, there is a tendency for their mathematical performance to slightly increase as well. While the correlation is weak, it still suggests a tendency for a positive relationship between these variables.

Similarly, the p-value of 0.00 for the 2020-2021 school year, which is below the significance level of 0.05, provides strong evidence to reject the null hypothesis. This suggests a significant relationship between the attitude of Grade 5 students in terms of confidence in learning mathematics and usefulness of mathematics, and their mathematical performance. The corresponding R-values of 0.33 and 0.23 indicate a low positive correlation between these variables, indicating that as students' attitude towards mathematics improves, there is a tendency for their mathematical performance to increase, although weakly.

In the most recent school year, 2021-2022, the p-values of 0.01 and 0.00 provide evidence to reject the null hypothesis, indicating a significant relationship between the attitude of Grade 5 students in terms of confidence in learning mathematics and usefulness of mathematics, and their mathematical performance. The calculated R-values of 0.22 and 0.29 suggest a weak positive correlation between these variables, implying that as students' attitude towards mathematics improves, there is a tendency for their mathematical performance to increase to some extent.

These findings highlight the importance of considering the attitudes of Grade 5 students towards mathematics and their perceived confidence and usefulness of the subject in relation to their actual performance. The significant relationships discovered emphasize the potential impact of students' attitudes on their mathematical achievement.

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4. Intervention plan of activities

Objective/s	Intervention/ Activities	Time Frame	Materials Needed	Persons Involve	Success Indicator
Strengthening Mathematical Concepts and Problem-Solving Skills	- Conduct interactive problem-solving sessions where students work in pairs or small groups to solve challenging math problems. Teachers provide guiding questions and encourage discussions on problem-solving strategies. - Engage students in hands-on mathematical investigations, such as exploring patterns, solving puzzles, and constructing models. These activities promote critical thinking and application of mathematical concepts. - Assign collaborative group work projects that involve solving real-world math problems. Students analyze problems, develop multiple solution	Throughout the school year, integrated into regular math lessons	- Problem-solving worksheets - Manipulatives (e.g., blocks, cubes, measuring tools) - Puzzles and brain teasers - Real-world math problem scenarios - Chart paper and markers for group presentations	Grade 5 Pupils and Math Teachers	- Increased student participation and engagement in problem-solving sessions - Demonstration of improved critical thinking skills through hands-on investigations -Successful presentation of real-world math problems by student groups

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	strategies, and present findings to the class - Provide opportunities for students to engage actively in challenging mathematical tasks that require higher-order thinking skills, such as analyzing data sets, making predictions, and justifying reasoning. Encourage exploration of multiple problem-solving approaches.				- Students demonstrating multiple problem-solving strategies and justifying their reasoning
Enhancing Measurement Skills	- Conduct practical experiments where students measure length, weight, and volume using appropriate tools and units of measurement. Students record their measurements and compare and contrast different units. - Introduce real-life applications of measurement in various contexts, such as measuring ingredients for a recipe or determining	Ongoing throughout the school year, integrated into math lessons	Measurement tools (rulers, scales, measuring cups, etc.) - Real-life objects for measurement (ingredients, classroom objects, containers, etc.)	Grade 5 Pupils and Math Teachers	- Increased confidence and accuracy in measuring length, weight, and volume - Application of measurement skills in real-life contexts - Clear explanations

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	the dimensions of objects in the classroom. Students apply their measurement skills to solve practical problems. - Engage students in interactive measurement tasks, such as estimating and measuring the length of objects in the classroom or measuring the volume of different containers. Encourage students to explain their measurement strategies and justify their choices of units. - Provide opportunities for students to practice measuring and solve real-world problems that require measurement skills. Assign measurement-related worksheets or projects where students apply their knowledge of measurement in practical scenarios.		- Measurement-related worksheets or projects		and justifications of measurement strategies - Successful completion of measurement-related worksheets or projects

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Promoting Real-World Relevance and Application of Mathematics	- Incorporate authentic problem-solving scenarios that require the application of mathematical concepts. These scenarios can include budgeting for a shopping trip, measuring ingredients for a recipe, or calculating distances and travel times. - Connect mathematical concepts to real-life situations and examples. For example, when teaching fractions, relate them to dividing a pizza or sharing items among friends. - Invite guest speakers from math-related professions, such as engineers, architects, or statisticians, to share their experiences and demonstrate how mathematics is used in their daily work.	Ongoing throughout the school year, integrated into math lessons	- Authentic problem-solving scenarios - Real-life examples and objects related to mathematical concepts - Guest speaker invitations - Hands-on project materials - Resources for independent research Class discussion prompts	Grade 5 Pupils and Math Teachers	- Increased recognition of the usefulness of mathematics in everyday life. - Enhanced motivation and engagement in mathematics - Improved ability to apply mathematical concepts to real-world situations - Demonstrated critical thinking, logical reasoning, and problem-solving skills in

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	- Engage students in hands-on projects or simulations that involve real-world applications of mathematics. For instance, students can design and build structures using geometric principles or conduct surveys and analyze data to draw conclusions. - Encourage students to explore and research real-world applications of mathematical concepts independently. Provide resources and guidance for students to investigate topics of interest, such as financial literacy, data analysis in sports, or geometry in architecture. - Facilitate class discussions and reflections on the practical applications of mathematics in everyday life, encouraging students				real-life scenarios - Active participation in class discussions and reflections on real-world applications of mathematics

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	to share their insights and experiences.				

Conclusions

Based on the findings of the study, the following conclusions were made:

1. The majority of Grade 5 students consistently achieved satisfactory to outstanding levels of performance in mathematics over the three consecutive school years, indicating the effectiveness of educational strategies and interventions employed during this period.
2. Grade 5 students generally possess a high level of confidence in counting and using numbers, but there is room for improvement in their confidence in measurement skills. Nurturing students' confidence and positive attitudes toward mathematics can contribute to improved learning outcomes in the subject.
3. The majority of Grade 5 students recognize the practical applicability of mathematics in various careers and professions, but there is room for further reinforcement in their perception of math's usefulness in understanding patterns and relationships. Promoting students' understanding and appreciation of the practical applications of math can influence their career choices and enhance their engagement in the subject.
4. There is a significant relationship between Grade 5 students' attitudes towards mathematics, including their confidence and perceived usefulness of the subject, and their mathematical performance. Although the correlations are weak, the findings highlight the importance of considering students' attitudes as they can influence their achievement in mathematics.

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