

Barriers in Learning Mathematics among the Grade 7 Students During the New Normal

Dona Rose D. Manayon



Abstract: To create an action plan and learning intervention plans, this study highlighted the obstacles that Grade 7 students from the three public national high schools in Mandaue City faced when learning mathematics during the 2020–2021 academic year. A sample of 114 students who completed the adopted research instruments, the Phil-IRI and Students' Perception towards Math, was selected as respondents using a descriptive-correlational approach. The data were statistically analysed using Pearson's r , weighted mean, frequency counts, and percentages. According to scientific findings, there were more females than males. Many of them are in the 12-year-old age bracket and spend only 30 to 60 minutes studying their math sessions. Additionally, nearly half of them are performing well in the fourth quarter. The 4th Q Grade falls by 1.173 for every unit rise in mathematical perceptions; mathematical perceptions account for 0.8% of the 4th Q Grade. The 4th Q Grade then drops by 0.134 for each unit rise in pre-requisite mathematical skills; pre-requisite mathematical skills account for 0% of the 4th Q Grade. Finally, the fourth-quarter grade rises by 3.342 for every unit improvement in reading comprehension; reading comprehension accounts for 18.7% of the fourth-quarter grade. It is crucial to remember that the values generated by the previous variables were negligible. The only thing worth mentioning is reading comprehension. Having better reading comprehension skills translates into a higher grade and better overall academic performance. Furthermore, there was no discernible relationship between grade and the perceived necessity of math skills. The only skill that reliably indicates overall academic success is reading comprehension. According to these results, reading comprehension is the main obstacle that seventh-grade students face in learning mathematics in the new normal. As a result, the concerned parties are advised to use the Learning Intervention Plans.

Keywords: Mathematical Perceptions, Pre-Requisites in Mathematics, Reading Comprehension, Descriptive-Correlation Design.

Nomenclature:

ODL: Online Distance Learning
MDL: Modular Distance Learning
BELCP: Basic Education Learning Continuity Plan
SLMs: Self-Learning Modules
IPO: Input-Process-Output
SD: Standard Deviation
TV: Television
DepEd: Department of Education

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I. INTRODUCTION

Mathematics is vital to many areas of our daily lives, including computer systems, engineering, physics, and biology. The Philippine government implemented the K-12 Basic Education Curriculum to guarantee that students acquire mathematics in its entirety [6]. Through a spiral path that allows students to study topics and skills appropriate to their developmental stages and achieves strong retention and mastery through ongoing review and revisit of prior material, this curriculum seeks to enhance mathematics instruction. However, the Philippines' educational system has been severely impacted by the recent COVID-19 outbreak. As a result, the Basic Education Learning Continuity Plan (BELCP) [3] was developed by the Department of Education (DepEd) to guarantee that learning opportunities are maintained while protecting the health and safety of staff and students. The BE-LCP has determined the Most Essential Learning and streamlined the current curriculum.

Competencies (MELCs) that will be the focus of the next academic year. While following the prescribed timetable and outlining the subjects to be taught, basic education teachers link their instruction to the MELCs [3].

DepEd is making significant changes at the central and field levels to deliver distance learning on a scale never before seen. Television (TV) or radio-based instruction, online distance learning (ODL), and modular distance learning (MDL) are the three categories of distance learning [1]. Modular distance learning, which combines tailored instruction with Self-Learning Modules (SLMs) in paper or digital formats, is used in most public schools. E-learning materials can be distributed on CDs, DVDs, USB storage devices, and computer-based programs, and learners can access electronic copies of the courses on cellphones, tablet PCs, or personal computers [1].

However, Filipino students have faced difficulties in learning mathematics during online distance learning. Lack of access to technology and internet connectivity is one of the major obstacles. Just 51.1% of Filipino households had internet connectivity as of 2020, according to the Philippine Statistics Authority [14]. About 20 per cent of the 6.5 million students [7] with internet access use computer shops or other public locations to connect, according to a DepEd survey. Some students find it challenging to access electronic learning resources or participate in online classes due to limited access to electronic devices, driven by the digital divide between urban and rural areas. This lack of access to technology has disproportionately affected students from low-income families, who are unable to purchase their own devices or use the internet.

Additionally, students may develop misconceptions or



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misinterpretations of mathematical concepts due to the lack of immediate feedback in the online learning environment, which could ultimately harm their learning [15].

When the researchers were tasked with overseeing the pupils' fundamental education, they encountered nearly identical obstacles to acquiring mathematics under the new normal. Their complete comprehension of the core ideas and tenets of those established lessons in that discipline at that curriculum level has been adversely affected. Unfortunately, the problem has affected other stakeholders in such research locations in addition to the schools. To address these concerns once the pandemic ends, the researcher has decided to empirically explore the barriers to students' learning status observed during the health crisis in the identified research contexts.

To intentionally create Enhanced-Instructional Plans that address the issues raised, the current study has identified the barriers to mathematics learning among Grade 7 students from designated schools in the Department of Education's Mandaue City Division during the academic year 2020–2021 [5].

II. MATERIALS AND METHOD

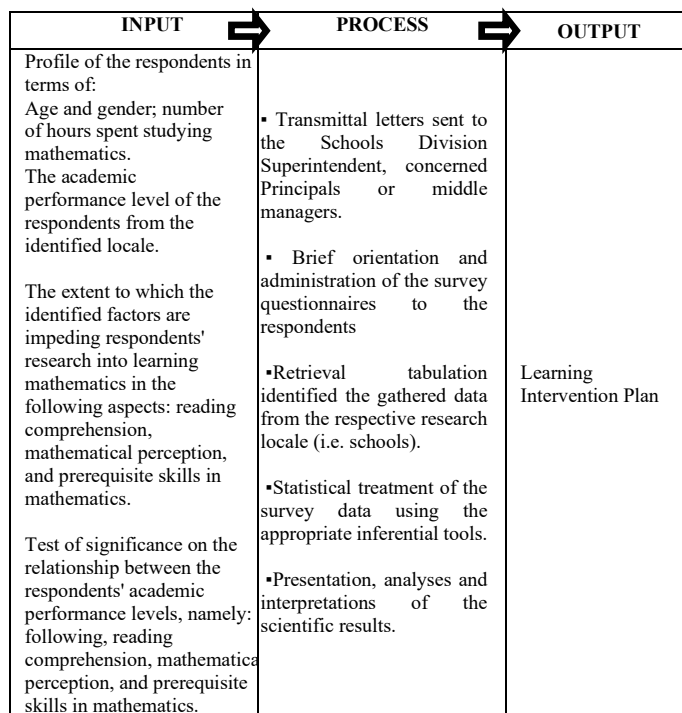
This study used the survey approach in a descriptive-correlational research design. The goal of the study was to identify the obstacles that prevent students from mastering mathematical concepts and that could affect their performance. To achieve the goal of linking respondents' academic achievement to the stated barriers to learning mathematics, a descriptive-correlational research design was employed.

Since a descriptive-correlational study strategy aims to investigate the relationship between variables by characterising them in their natural environments, it is a suitable choice [17]. It entails making observations and gathering information without altering any factors. The purpose of this approach is to characterize the attributes of the variables and ascertain whether they are correlated. Following data collection, statistical methods are used to analyse the data and identify trends, patterns, and correlations among variables. When the researcher wishes to identify variables that may be associated with a specific result or behaviour without necessarily establishing causation, this research design is beneficial. 25 Respondents were selected from the designated research environments using simple random sampling, and data were collected via an online survey. Since this sampling strategy chooses a subset of people or things from a broader population, with each member of the population having an equal chance of being chosen, it is appropriate for the recent study. With this method, a random sample is selected without regard to predetermined standards, ensuring that each person in the population has an equal chance of being selected. This approach helps increase the sample's representativeness and lessen the possibility of bias in the sample selection process [13]. The data were analysed using descriptive statistics.

A. Flow of the Study

The current study utilised an Input-Process-Output (IPO) model, offering a structured framework that deconstructs a system into more manageable components to enhance

readers' comprehension of the discussed issues [12].



[Fig.1: Schematic Diagram of the Study]

B. Respondents

The research involved 114 participants from Grade 7 classes across selected secondary schools in the Mandaue City Division: Labogon National High School (47 students), Paknaan National High School (41 students), and Tabok National High School (26 students). The study sought to assess their reading comprehension, mathematical perceptions, prerequisite skills, and academic performance in mathematics. The focus on Grade 7 students is essential because it is a critical stage in their educational and personal development. As they transition to a more structured learning environment, they face new challenges that can impact their academic performance and emotional well-being.

Table I: Distribution of Respondents

Respondents	Sample	%
Grade 7 students from Labogon NHS	47	41.23
Grade 7 students from Paknaan NHS	41	35.96
Grade 7 students from Tabok NHS	26	22.81
Total	114	100

C. Instrument

This study employed a questionnaire to evaluate the obstacles to learning and mastering mathematical skills, which can substantially affect academic achievement. The questionnaire uses a 4-point Likert scale, requiring all respondents to select the option that most accurately reflects their preference. The scale is categorized as follows: 4= Always, 3= Sometimes, 2= Seldom, and 1= Never, utilizing a standardized instrument titled "Students' Perception towards Mathematics" [10]. The questionnaire was subjected to content and logical validation by qualified Mathematics educators at the high school, college, and graduate levels to ensure its reliability and validity.

III. RESULTS AND DISCUSSION

Table II: Summary for Age and Gender of Respondents from 3 Schools (n=114)

Age (in years)	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
11	1	0.88	0	0	1	0.88
12	30	26.32	34	29.82	64	56.14
13	4	3.51	6	5.26	10	8.77
14	6	5.26	18	15.79	15	13.16
15 & above	47	41.23	67	58.77	114	100
Subtotal						

The table clearly indicates that the majority of responders were female, comprising 67 (58.8%) of the 114 Grade-7 students, while males accounted for 41.23%. Furthermore, it indicated that a significant portion of these students, 64 (56.14%) out of 114, were 12 years old. Considerable diversity exists within each gender group, with some individuals outperforming or underperforming the group average, irrespective of gender [8].

In conclusion, although there may be disparities in mathematical performance between males and females, these discrepancies are likely attributable to a multifaceted interplay of factors rather than to a straightforward gender-based distinction in mathematical aptitude. The age of pupils should be regarded as a factor influencing their performance in evaluations (i.e., quizzes, tests, or examinations), as it exposes them to varying levels of anxiety. Concerning the latter, they would struggle to comprehend Mathematics. Consequently, their performance will be influenced during this academic assessment [9].

A. Number of Hours Spent Studying Mathematics

The time required to study the subjects is equally essential for acquiring content knowledge. The researcher has opted to include this variable in the current investigation.

Table III: Summary for Number of Hours Spent Studying Mathematics (n=114)

No. of Hours Spent Studying Math	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Up to 30 minutes	8	7.02	8	7.02	16	14.04
More than 30 min. But less than 1 hr.	16	14.04	25	21.93	41	35.96
More than 1 hour but less than 2 hours	16	14.04	19	16.67	35	30.7
More than 2 hours but less than 3 hours	5	4.39	6	5.26	11	9.65
More than 3 hours but less than 4 hours	1	0.88	3	2.63	4	3.51
More than 4 hours	1	0.88	6	5.26	7	6.14
Subtotal	47	41.23	67	58.77	114	100

The chart indicates that 41 (36%) of the 114 students reported studying Mathematics for more than 30 minutes but less than 1 hour daily. Typically, a prolonged study is considered essential for reviewers to achieve a deeper understanding of the material. Despite these Grade-7 students' efforts to study their lessons, they encountered significant challenges in mastering Mathematics in the new regular environment. The study by [13] found that almost all

current students are dedicating less time to their studies after regular classes.

B. Level of Academic Performance of The Respondents from the Identified Research Locale

Table IV: Summary for Mathematics Grades for the 4th Quarter (n=114)

Average Grade	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Outstanding	5	4.39	36	31.58	41	35.96
Very Satisfactory	28	24.56	21	18.42	49	42.98
Satisfactory	11	9.65	8	7.02	19	16.67
Fair Satisfactory	3	2.63	2	1.75	5	4.39
Didn't meet the expectation	0	0	0	0	0	0
Subtotal	47	41.23	67	58.77	114	100

The chart indicated that 49 (42.98%) of the Grade 7 pupils performed well in Mathematics, achieving an average rating of Very Satisfactory (85 – 89), and notably, all students passed the course. The scientific investigation conducted by [4] found no enhancement in learners' mathematical competence as they progressed to higher grades. The reasoning focused on the increased likelihood that, as these youngsters mature, they become more cognizant of their abilities as they progress to the next curricular level. This situation effectively demonstrated the respondents' substantial achievement in Mathematics during the quarter.

C. Reading Comprehension

Reading comprehension is an essential skill in mathematics, facilitating students' understanding and interpretation of mathematical issues and concepts. Mathematical problems are often presented orally, requiring students to comprehend the situation before attempting a solution. Moreover, textbooks and other mathematical resources usually include intricate explanations and calculations that require advanced reading comprehension skills for a complete understanding. Thus, the relevant tables clarified the current status of skills among Filipino learners in this domain.

Table V: Summary for Reading Comprehension (n=114)

Indicator	Mean	SD	VI
Speed	2.61	0.53	The students can profit from instruction.
Comprehension	2.33	0.82	The students can profit from instruction.
Reading	2.61	0.53	The students can profit from instruction.

Table 5 illustrates the respondents' reading comprehension, indicating that their speed (2.61), comprehension (2.33), and reading skills (2.61) suggest they might benefit from instruction. Evidence indicates a correlation between reading speed and maths performance. Numerous studies suggest that students with accelerated reading speeds generally perform better on mathematics assessments and attain higher math grades [2].

D. Summary Mathematical Perception

Table VI: Summary for Mathematical Perception (n=114)

	Indicators	X	SD	VI
1	Mathematics is one of my most fearful subjects.	2.84	0.70	Sometimes
2	My mind goes blank, and I am unable to think clearly when working with Mathematics.	2.80	0.72	Sometimes
3	Studying Mathematics and solving mathematical problems makes me feel nervous.	2.98	0.83	Sometimes
4	Mathematics makes me feel uncomfortable.	2.69	0.79	Sometimes
5	I am always under a terrible strain in a math class.	2.77	0.82	Sometimes
6	When I hear the word Mathematics, I have a feeling of dislike	2.62	0.86	Sometimes
7	Mathematics does not scare me at all.	2.98	0.78	Sometimes
8	I expect to do pretty well in any Math class I take.	2.87	0.73	Sometimes
9	I am always confused in my Mathematics class.	2.86	0.79	Sometimes
10	I have a lot of self-confidence in Mathematics.	2.82	0.70	Sometimes
11	I can solve mathematics problems without too much difficulty.	2.69	0.72	Sometimes
12	I feel insecure when attempting Mathematics.	2.89	0.79	Sometimes
13	I learn Mathematics easily.	3.03	0.76	Sometimes
14	I believe I am good at solving Math problems.	2.72	0.71	Sometimes
15	Mathematics is a very worthwhile and necessary subject.	3.12	0.78	Sometimes
16	I want to develop my Mathematical skills	3.25	0.77	Always
17	Mathematics helps develop the mind to think.	3.17	0.77	Sometimes
18	Mathematics is essential in everyday life.	3.38	0.73	Always
19	Mathematics is one of the most important subjects for people to study.	3.40	0.74	Always
20	Elementary/ High school math courses would be beneficial, no matter what I decide to study.	3.45	0.66	Always
21	I can think of many ways that I use Math outside of school.	3.07	0.70	Sometimes
22	I think studying advanced Mathematics is useful.	3.28	0.72	Always
23	Math is a complex, dull and boring subject.	2.70	0.90	Sometimes
24	Mathematics is a fascinating subject.	3.35	0.71	Always
	Average	2.99	0.76	Sometimes

Table 6. The table clearly indicates that out of 24 signs, 10 (41.67%) were occasionally exhibited by the pupils, while 14 (58.33%) were infrequently observed. This indicates that a significant portion of the participants possesses a diminished sense of mathematics and its practical application in daily life. Conversely, pupils with a negative disposition towards mathematics may encounter difficulties with mathematical assignments and exhibit diminished proficiency in the subject. This association may stem from various variables, including drive and self-assurance in mathematical skills. Students who perceive mathematics as pleasurable and beneficial may exhibit greater motivation to engage with mathematical problems and greater confidence in their mathematical abilities, leading to improved performance. Conversely, students who perceive mathematics as tedious or inconsequential may exhibit diminished motivation to engage with mathematical assignments and reduced confidence in their mathematical skills, leading to inferior performance. Various factors, including prior mathematical experiences and the perspectives of influential individuals, may influence attitudes towards mathematics. Although 58.33% of students perceive math negatively, 41.67% still

consider it valuable and interesting. These students also have higher math self-efficacy.

E. Pre-Requisite Skills in Mathematics

Developing foundational mathematical skills is crucial for high school pupils to excel in advanced mathematics and subsequent academic and professional endeavours. Prerequisite abilities serve as foundational elements for more intricate mathematical concepts; in their absence, pupils may find it challenging to comprehend and apply them.

Table VII: Summary for Pre-requisite Skills in Mathematics (n=114)

	Indicators	X	SD	VI
1	Addition/subtraction/multiplication/division of mixed & straightforward fractions and decimals, with or without regrouping, has helped me compute fractions with variables.	3.36	0.73	AL
2	Solving routine & non-routine problems involving addition/subtraction/multiplication/division of fractions & decimals using appropriate problem-solving strategies helps represent real-life situations & solve problems involving real numbers.	3.20	0.66	ST
3	Finding the missing term in a proportion has helped me evaluate algebraic expressions for given values of the variables.	3.16	0.74	ST
4	Solving word problems involving ratios and proportions enhances my ability to solve linear equations and inequalities in one variable.	3.03	0.82	ST
5	Finding the rate, base, and percentage has supported my understanding in performing operations on rational numbers.	3.23	0.77	ST
6	Solving per cent problems, such as per cent of (increase, decrease, discounts, original price, sale price, markup price), stimulates my interest in illustrating the measures of variability (range, average, deviation, variance, standard deviation) of statistical data.	3.14	0.76	ST
7	Performing two or more operations using the GEMDAS rule has helped me solve algebraic equations.	3.05	0.83	ST
8	Describing and comparing integers with other numbers has supported my understanding of the Real Number System.	3.28	0.77	AL
9	Performing basic operations on integers helps me in computing the sum of 2 or more polynomials.	3.06	0.79	ST
10	Representing quantities using algebraic expressions and equations helped me differentiate between them.	3.17	0.74	ST
11	Calculating speed, distance, and time has helped me solve worded problems involving the angle of depression.	3.17	0.75	ST
12	Finding the area of composite figures has helped me solve problems involving the sides and angles of a polygon.	3.13	0.83	ST
13	Interpreting data representations (tables & pie charts) has guided me in choosing an appropriate graph to represent organised data.	3.15	0.77	ST
14	Performing experiments and recording outcomes facilitates finding the probability of a simple event	3.15	0.69	ST
15	Making simple predictions from experiments has helped solve problems involving the probabilities of simple events.	3.20	0.66	ST
	Average	3.16	0.75	ST

Table 7 summarises the prerequisite mathematical competencies of the surveyed



pupils (n=114). The table presents the average (X), standard deviation (SD), and value interpretation (VI) for each of the 15 indicators. The mean score across all 15 markers is 3.16, indicating that students have a reasonable level of competency in these essential mathematical skills. The top-performing indicators pertain to fractions and decimals (indicator 1), the description and comparison of integers (indicator 8), and the interpretation of data representations (indicator 13), with average scores of 3.36, 3.28, and 3.31, respectively.

Conversely, the indicators with the lowest ratings are resolving issues involving ratio and proportion (indicator 4) and executing two or more operations utilising the GEMDAS rule (indicator 7), with average scores of 3.03 and 3.05, respectively. All three tables indicate that the highest-rated skill pertains to fractions or decimals. Furthermore, all three tables show that pupils encounter difficulties in solving ratio and proportion word problems. Paknaan NHS possesses the highest average rating, whereas Tabok NHS has the lowest. Labogon NHS has the highest proficiency rating in the Real Number System, whilst Paknaan NHS has the lowest. Tabok NHS has the lowest grade in evaluating algebraic expressions, whereas Labogon NHS has the highest score. In summary, although there are variations in the individual skills students find challenging, all three tables demonstrate a need for improvement in problem-solving, especially in addressing word issues related to ratios and proportions.

Table VIII: Test of Significance on the Relationship Between 4th Quarter Grade and Mathematical Perceptions, Pre-Requisite Skills in Math and Reading Comprehension as Barriers in Learning Mathematics Among the Basic Education Learners During the New Normal

4th Quarter Grade and	r	Correlation	p-value	Decision	Interpretation
Mathematical perceptions	-0.087	Negligible	0.179	Do not reject Ho	No significant relationship
Pre-requisite skills in math	-0.016	Negligible	0.433	Do not reject Ho	No significant relationship
Reading comprehension	0.433	Moderate positive	0	Reject Ho	Significant relationship

The data in Table 8 indicate that only reading comprehension exhibits a significant, moderately positive correlation with the student's 4th Quarter grade ($r = 0.433$, $p < .05$). In contrast, mathematical perception and prerequisite abilities show nonsignificant associations. The findings indicate that reading comprehension significantly influenced the students' performance in the fourth quarter. In other words, an increase in reading comprehension skills correlates with enhanced performance in the fourth quarter. This aligns with research demonstrating a robust correlation between reading comprehension and overall academic success. Students with strong reading comprehension skills generally achieve superior academic performance, as reading comprehension is a significant predictor of educational achievement [11].

A study revealed a substantial correlation between reading comprehension and academic success in mathematics and science, as well as overall GPA [16]. A separate study indicated that reading comprehension significantly predicts academic achievement, even when accounting for prior achievement and other factors such as socioeconomic status

(SES) and parental education [11]. Standard Multiple Regression was employed to evaluate the efficacy of the predictor variables: Mathematical perceptions, prerequisite skills in mathematics, and reading comprehension in forecasting the 4th Quarter grade.

Table IX: Regression Results

Variables under Statistical Inference	R-value	Slope	Intercept	R2 Value
Mathematical perceptions	-0.087	-1.173	90.901	0.008
Pre-requisite skills in math	-0.016	-0.134	87.826	0
Reading comprehension	0.433	3.342	78.98	0.187

For each unit rise in Mathematical perceptions, the 4th Quarter Grade declines by 1.173; Mathematical perceptions accounts for 0.8% of the 4th Quarter Grade. Subsequently, for each unit improvement in prerequisite mathematical abilities, the 4th Quarter Grade diminishes by 0.134; prerequisite mathematical skills account for 0% of the 4th Quarter Grade. Finally, for each unit increase in Reading comprehension, the 4th Quarter Grade rises by 3.342; Reading comprehension accounts for 18.7% of the 4th Quarter Grade. The values generated by the preceding variables were negligible. Only reading comprehension merits attention. Superior reading comprehension skills correlate with elevated overall academic performance. In summary, reading comprehension is a significant predictor of overall academic success and is an essential skill for achievement in educational disciplines. Consequently, educators and parents must prioritise developing children's and adolescents' reading comprehension.

IV. CONCLUSION

From the findings of the study, the following conclusions are drawn:

A. Student Profile. The majority of responses were from females, comprising 67 (58.8%) of the 114 Grade-7 students, while their male counterparts accounted for 41.23%. Furthermore, it indicated that a significant portion of these students, 64 (56.14%) out of 114, were 12 years old. The age of students influences their performance in evaluations, as they are subjected to varying levels of anxiety. Concerning the latter, they would struggle to learn Mathematics.

B. Duration of Time Allocated to the Study of Mathematics. Forty-one students, representing 36% of the 114 respondents, indicated that they dedicate more than 30 minutes but less than 1 hour daily to studying Mathematics. Typically, prolonged research is considered essential for reviewers to gain a deeper understanding of the material. Despite these Grade 7 pupils' efforts to engage with their studies, they encountered significant challenges in effectively mastering Mathematics in the new typical environment.

C. Mathematical Evaluations for the Fourth Quarter. The data from the academic quarter indicated that 49 (42.98%) of the Grade-7 students excelled in Mathematics, achieving an average rating of Very Satisfactory (85 – 89). Notably, all students

successfully passed the subject Test of Significant Relationship between the 4th Quarter Grade and Mathematical Perceptions. No connection existed between the 4th Quarter Grade and Mathematical Perceptions among the students, as indicated by the computed value of r (-0.087), which is less than the crucial threshold of 0.179.

D. Assessment of the Significant Correlation between Fourth Quarter Grades and Prerequisite Skills in Mathematics. No correlation existed between the 4th Quarter Grade and prerequisite skills in Mathematics among the students, as evidenced by the computed value of r (-0.016), which is less than the crucial value of 0.433. Assessment of the Significant Correlation between Fourth Quarter Grades and Reading Comprehension. The correlation between the 4th Quarter Grade and Reading Comprehension among the pupils is quantified as r (0.433), which is less than the critical threshold of 0.000. Consequently, reading comprehension is a significant predictor of overall academic success and an essential skill for achievement in educational disciplines.

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AUTHOR'S PROFILE



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Ms. Dona Rose D. Manayon, is a professional and passionate educator who aims to bring the field of mathematics education to a new level by using innovative and learner-centered methodologies. In August 2021, she graduated with a Master of Arts in Education, Major in Teaching Mathematics, from Cebu Technological University (CTU) - Main Campus, Cebu City. She has an excellent academic record, supported by a Diploma in Professional Education (2018) and a Bachelor of Science in Civil Engineering (2013), both earned at the same university. Ms. Manayon started teaching at Labogon National High School located at Mandaue City where she is currently employed as a Regular/Permanent Teacher I. Her career background reflects her technical base in engineering as well as her interest in teaching math. She meets the professional requirements, as she is a Licensed Professional Teacher (LET Passer, March 2018) and a Licensed Master Plumber (July 2016), demonstrating her multi-professional competencies in education and technical practice. Ms. Manayon is an ardent advocate of lifelong learning. She has attended several trainings and seminars, including the Virtual In-Service Training on Public School Teachers (ICTS-EdTech Unit, Central Office, 2021), Positive Discipline in Everyday Teaching (PDET), and Project Refresh: Tuklas ICT in One, as part of the Division of Mandaue City.

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