



Republic of the Philippines
Department of Education
REGION IV-A CALABARZON
CITY SCHOOLS DIVISION OF BIÑAN CITY

PROJECT I-MASID

(INTENSIFY - MATHEMATICS ASSISTANCE FOR STRUGGLING LEARNERS THROUGH INTERVENTION DEVELOPMENT IN EACH GRADE LEVEL)



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ABSTRACT

This study aimed to give assistance to those who were having difficulty with Mathematics by providing intervention or remediation to help them improve their performance on the basic skills in Mathematics OF Grade IV-Jacinto. Project I-MASID, which sought to decrease the number of individuals who were non-numerate and enhance their numeracy abilities, was used to achieve this.

The study used 42 learners from Grade IV-Jacinto of Dela Paz Main Elementary School as the participants of the study. The grade four students were intentionally chosen for the sample by the researcher. This action research employed the quantitative method, with the teacher-made test serving as the main tool for data collection. The descriptive research design was used to arrange and categorize the data gathered for this observation. To make the frequency, percentage method, and descriptive statistics easier to use for result presentation and understanding, the collected data were encoded, tallied, and tabulated. The results indicated that the group needed to work on developing the basic skills prior to the implementation of the study. When the teacher-researcher used Project I-MASID for remedial or intervention activities, the learners' Post-test results demonstrated an improvement in their level of numeracy skills. The findings suggested that the school's I-MASID experiment was effective. There were implications reflected after the implementation of the study and recommendations were provided based on the findings

Keywords: Numeracy skills, intervention activities

INTRODUCTION

Early Math and numeracy skills are the building blocks of all future Math classes. Without these skills, students will continue to struggle with higher Math concepts. Students need to learn how to solve problems, one of the basic early Math skills, for all areas of academics and life outside of school. Early Math and numeracy also coincide with language and critical thinking development (Toll & Van Luit, 2014; Vilorio, 2014).

Literacy and numeracy help learners gain the fundamental skills necessary to achieve success in life. It is a skill that is crucial for accessing the broader curriculum because they are used in many aspects of our lives. An absence of mathematical confidence and poor numeracy skills are obstructions to achieving the school project objectives. Numeracy is defined as the ability to access, use, and interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of various situations in intermediate. To be numerate is to confidently and effectively use mathematics to meet the everyday demands of life. Numeracy is important for individuals to develop logical thinking and reasoning strategies in their everyday activities.

A good teaching and learning process strived to produce good changes for learners in conducting teaching and learning activities that can achieve the goals set is not easy. Therefore, we need the most effective and efficient teaching and learning strategy. Learning is a process of interaction between teacher and learners. The learning component includes the teacher, learners, strategies, and tools used in learning. Teachers as educators must realize that the progress of education depends more on the dedication of the teacher or stakeholders and his creativity after knowing the changes that occur. For this reason, Dela Paz Main Elementary school with its

initiative is organizing face-to-face learning activities or remediation classes for those learners who are struggling in Mathematics. The teacher is expected to monitor the progress of the learners to ensure the concept and competencies are achieved

In Line with DO 47, S. 2017 – Amendment To Deped Order No. 18, S. 2017 (Guidelines On The Utilization Of The 2017 Every Child A Reader Program Funds For The Early Language, Literacy, And Numeracy Program: Professional Development Component)

strong literacy and numeracy skills lay the foundation for all learners to succeed at school and their daily life. With the best literacy and numeracy support it can improve your skills. **Project I-MASID (Intensify - Mathematics Assistance for Struggling learners through Intervention Development in each grade level)** is designed to assist grade 4 learners in developing their numeracy skills to achieve proficient results.

Similar to the scenarios revealed from the studies about struggling learners in Mathematics, the performance of Dela Paz Main Elementary School learners is alarming. Based on the observation of the teacher-researcher, most learners have difficulty on the basic skills in Mathematics. As a Mathematics teacher, it has been observed that most of the learners do not know and apply the 4FOs. Some are not even familiar with the basics. These reasons lead to their difficulty and identified as non-numerates. Likewise, some Grade IV-Jacinto learners track have difficulty in basic numeracy skills.

The alarming result that needs to be addressed was the numeracy level conducted by the teacher-researcher. The test was conducted as one of the

procedures in their school project, namely, **Project I-MASID** (**I**ntensify - **M**athematics **A**sistance for **S**truggling learners through **I**ntervention **D**evelopment in each grade level) The total number of learners enrolled in Grade IV-Jacinto was 42 learners where, only 36% passed the test with a total number of 15 learners, while 64% failed the test with a total number of 27 learners. Though the test conducted was focused on basic 4FOs still, it may be linked to the learners' Numeracy skills.

According to the observation, the teacher-researcher assisted the students in the study in strengthening their comprehension of the fundamental four operations (4FOs) and in improving their numeracy abilities, particularly in problem-solving. To achieve the objectives of this study, the researcher taught the learners basic fundamental operations in the lessons in Mathematics. The researcher conducted a remedial class as intervention under the school **Project I-MASID** (**I**ntensify - **M**athematics **A**sistance for **S**truggling learners through **I**ntervention **D**evelopment in each grade level). It will therefore be carried out at a different time.

The findings of this study may motivate Math teachers to conduct remedial under Project I-MASID as part of their intervention program to improve learners' numeracy skills. Moreover, they might develop and employ various learning or instructional materials based on the learning preferences of the learners. Most importantly, learners with low scores, particularly those struggling or non-numerates, will be taught accordingly. Their numeracy skills will improve after finding the results of the study. Thus, the

implementation of the intervention, Project I-MASID, will be part of the school's project to enhance the learners' numeracy skills. Upon the project's implementation, its beneficiaries, the struggling learners, will have the chance to refresh their understanding of the fundamentals of 4FOs.

METHODOLOGY

The participants of this study were the Grade IV- Jacinto learners. They were engaged in this school remediation project entitled I-MASID (**I**ntensify - **M**athematics **A**sistance for **S**truggling learners through **I**ntervention **D**evelopment in each grade level) which aimed to help the struggling learners to improve their numeracy skills that used in Dela Paz Main Elementary School for SY 2022-2023.

The grade 4 learners were informed and asked for their consent together with their parents/guardians to voluntarily participate in this study, were the data gathered is for the improvement of the numeracy skills of the struggling learners.

Quantitative data analysis was used in this study. The data was analyzed and interpreted using frequency, average, and percentage to identify the percentage of grade 4 numeracy level in Dela Paz Main Elementary School under Project I-MASID. Observations and analysis were employed during the implementation of the project. Then, the researcher looked at and recorded the implications.

The procedure for data collection were summarized below:

After the approval, the teacher-researcher conducted the Pre-Numeracy Assessment. Then, regular remediation under Project I-MASID were performed for 30 minutes to 1 hour. After the remedial, a Post-Numeracy assessment was conducted to see their progress. The same Numeracy Assessment was used for the Post-Test. As soon as the

selected participants accomplished all instruments, consolidation of results was executed. These results were analyzed using percentage distribution, and descriptive statistics. Then, interpretation was performed to discuss the results of the study. The data will be encoded, tallied, and tabulated to facilitate the presentation and interpretation of results using the following:

Percentage Method- used in determining the percent or part of a variable. It follows the formula:

$$P = \frac{F \times 100}{N}$$

Where: P=Percentage
F = Frequency
N = Sample Size

Descriptive statistics: Total Weighted Average (mean) was used to answer the problem.

$$\text{Formula: } X = \frac{x_1 + x_2 + x_3 + x_4 + x_5}{n}$$

Where:
X = Mean
x = Individual Item
n = Number of Items

Phase 1 which is the Pre- Implementation Stage under that we have the Planning , Data Collection, Information Dissemination and Preparation of various tool

For Phase 2 the Implementation Stage we have used various tools to monitor the Grade 4 learners' numeracy skills under the school Project I-MASID

And for Phase 3 the Post Implementation stage. Evaluated the grade 4 learners numeracy skills using the Post- Numeracy Assessment tool. The results will be the basis for improvement

RESULTS

Table 1: Pre-test and Post-Test Numeracy Levels of the Participants

	Mean	MPS	Interpretation
Pre-Test	7.24	36%	Less Proficient
Post-Test	14.95	75%	Very Proficient

Table 1 This shows the frequency and percentage according to Pre- Test and Post- Test Numeracy Assessment of Grade IV respondents it show the big increase of their performance to 39%.

Table 2: Pre- Test on Numeracy Grade Four Jacinto

Score	Description	Frequency	Percentage
17-20	Excellent	0	0%
13-16	Very Proficient	0	0%
9-12	Proficient	15	36%
5-8	Less Proficient	21	50%
1-4	Poor	6	14%
	Total	42	100%

Mean - 7.24

MPS – 36%

Table 2 This shows the frequency and percentage according to Pre-Test on Numeracy Skills of Grade IV respondents; 15 pupils or 36% got proficient level, 21 pupils or 50 % got less proficient, 6 pupils got poor scores. The Pre- Test shows that the MPS got 36% indicates

Table 3: Post- Test on Numeracy Grade Four Jacinto

Score	Description	Frequency	Percentage
17-20	Excellent	8	19%
13-16	Very Proficient	26	65%
9-12	Proficient	18	43%

5-8	Less Proficient	0	0%
1-4	Poor	0	0%
	Total	42	100%

Mean – 14.95

MPS – 75%

DISCUSSION

The study assessed the level of numeracy of the grade 4 learners through a teacher-made test which was validated by the school head and master teachers. The participants of this study, were the identified struggling learners or Non-numerates during the Pre-Numeracy Assessment to be part of remedial class under Project I-MASID. Based on the results of the pre-test, none of the participants was identified as Very proficient or Excellent. There were fifteen (15) or 36% of the participants were identified as Proficient, twenty-one (21) or 50%, and six (6) or 14% were poor.

After the implementation of the intervention project, a post-test was conducted and it was revealed that 75%, meaning most of the participants were identified as Proficient, Very Proficient, and Excellent. Based on the results of the pre-test and post-test numeracy levels of the participants there is a significant difference revealing the improvement brought by the intervention under Project I-MASID.

Remedial class scheduling needs to be taken into account because learners' schedules are different, according to the researcher's reported implications. Teachers also need to design activities that will increase learners' enthusiasm for Mathematics.

Even though the researcher's goal of improving learners' numeracy

skills was achieved in this study, other concerns were also raised. As a teacher-researcher who is determined to help the learners, this aims to conduct remedial class under Project I-MASID every after class. Before the class in Mathematics begin some drill on 4Fos should be done through this, all the learners will be refreshed about the basics of numeracy skill and learn in the first five minutes of their class. It is then, that the teachers must do something to develop and enhance the numeracy skills of the learners which may also improve their academic performance.

ACKNOWLEDGEMENTS

The researcher would like to express his sincere and profound gratitude to everyone who has helped to complete this study by providing effort and assistance in one way or another.

Nenette M. Lacuarin, PhD, Principal II, Dela Paz Main Elementary School for her support and for pursuing this study;

Mr. Bladrin B. Belen, OIC - Public School District Supervisor, District II for encouraging the researcher to accomplish this study;

Mr. Reynante M. Sofera, Public School District Supervisor, District II for his advise to enhance this study;

Mr. Edward R. Manuel, Senior Education Program Specialist, for sharing his expertise and guidance in the completion of this study;

To my **Grade IV-Jacinto pupils, parents, and teachers** who participated in the study and for their cooperation;

To my wife **Evangeline J. Ilagan**, for the support and continuous understanding and unconditional love.

To my Children who serve as my inspiration to pursue this study.

Above all, to **God Almighty**, the author of knowledge and wisdom, for His endless love;

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