



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

**PROJECT IANS (INTEGRATION AND APPLICATION OF NETWORK SYMBOLS):
A TOOL TO IMPROVE PERFORMANCE IN ENGLISH OF GRADE V- GEMINI
IN DELA PAZ MAIN ELEMENTARY SCHOOL**



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ABSTRACT

This study attempted to determine the effectiveness of the tool when it comes to academic performance in English for Grade 5 learners. Additionally, this study aimed to investigate the relationship between the IANs Symbol as instructional materials and their level of performance. The researcher-teacher found that even in the most basic areas, the performance of students in grade 5 learners is poor. This study addressed and provided an intervention or teacher-made instructional materials using IANs symbol. to enhance the performance of Grade V-Gemini of Dela Paz Main Elementary School. **Project IANS (Integration and Application of Network Symbols)** is in the IAN symbol libraries currently contain 3040 custom-made vector symbols designed specifically for enhancing communication products with diagrammatic representations of complex processes and have appealing forms it was implemented to help the teachers improve their instructional materials and use to improve the performance of grade 5 learners in English subject particularly on the basic rules of the Subject and Verb Agreement. Using the teacher-made tool the performance of the learners in grade 5 were revealed through the use of pre-test and post-test. None of the respondents identified as Highly Proficient or Proficient in the pre-test. After the post-test twelve are identified as Highly Proficient and nineteen are Proficient. It is evident that the performance of grade 5 learners improved after the implementation of the project.

Keywords: English proficiency, performance, instructional materials

INTRODUCTION

In line with the implementation of the Enhance Basic Education Act of 2013 (Republic Act No. 10533), the Department of Education is adopting the closed Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program. Classroom Assessment is an integral part of curriculum implementation. It allows the teachers to track and measure learners' progress and adjust instruction accordingly. Classroom assessment informs the learners, as well as their parents and guardians of the progress.

Academic performance is the outcome of pupils' effort in examination. Pupils' academic performance is determined by several factors (Eze et al. 2016). Academic performance is measured by the average marks of the previous quarter and the total average marks. The determining factors of pupil's performance have attracted the attention of researcher. She tries to determine which variables impact of pupil's performance in positive and negative direction.

The academic performance of pupils reflects on their ability to demonstrate the knowledge they have learned in quizzes and examination (Barkley, 2004). The importance of academic performance is not only evident to the learners but also to the school as it is a measure of the success of their education process. Studies in the education literature have examined the factors that may influence students' performance that include physical facilities, materials, attitude, aspiration, and self-awareness (Hizzi and Naqvi 2006; Garkaza et al. 2011); Cosmas et al. 2013; Al-Hadrami and Morris 2014)

The IAN Symbols Integration and Application Network is from The University of Maryland Center for Environmental Science is one of 12 universities in the **University System of Maryland**. The free downloadable *symbol* libraries provide users with *symbols* crafted by *IAN* science communicators for use in constructing conceptual diagrams. The IAN symbol libraries currently contain 3040 custom-made vector symbols designed specifically for

enhancing science communication products with diagrammatic representations of complex processes. It can be downloaded individually, or as an entire package in AI, SVG, or PNG formats and it can be used as instructional tools in teaching English and other subjects.

The findings of the study will reflect the need to address the existing low pupil's performance of grade 5 in English subject and it is the main reason for the researcher to conduct this study. As an English teacher, it is expected to conduct an intervention for the learners to improve their academic performance. Finally, other teachers may also use IAN Symbol for their learners as intervention to prove its effectiveness.

The study is all about the poor performance or MPS of Grade 5 pupils in English. Based on the observation of the teacher researcher, most learners are not focused in the lesson or sometimes not interested in the materials used by the teacher. They don't even care about their scores and some of them have difficulty comprehending in English. This is the reason why the learners got low test results. This is the challenge for the adviser to motivate them to increase the knowledge of the pupils with low performance in English.

According to the findings, the teacher-researcher assisted the learners in the study in improving their comprehension of the basic rules of subject-verb agreement, particularly when constructing a simple sentence. The researcher used IAN symbols to teach the learners in order to meet the objectives of the study.

The results of this study may encourage teachers not only English teachers to craft their own instructional materials using IAN Symbol as their intervention or instructional materials to enhance learners' performance in English. Additionally, based on the needs of the learners, they might develop and

employ various instructional materials from IAN Symbols. They will get the opportunity to review the fundamental lessons they were unable to grasp. Their performance in English will improve after finding the results of the study. Thus, the school's effort to improve learners' performance will include the implementation of Project IANs.

METHODOLOGY

The study utilized Qualitative Case The Grade V- Gemini of Dela Paz Main Elementary School for SY 2022-2023 were the participants in this study. The researcher chose the learners based on their written performance primarily their score in pre-test. The participants were permitted by their parents or guardian as participants of this study.

They were forty-two learners of Grade V- Gemini who were involved in the study and were identified the teacher-researcher after conducting a Pre-Test. Also, they were voluntarily participate in the research with permission from their parents or guardians by submitting their consent letter.

The main concern of this research was to help Grade 5 learners with low performance in English with the help of IAN Symbols as a means of instructional materials or tool in teaching learning process. The learners who were not performing well are the priority of this study. The teacher-researcher ask consent from the respondents or parents.

The participants in this study were chosen through the use of purposive sampling. The target participants of the study were Grade 5 learners of Dela Paz Main Elementary School. With parental permission, learners and stakeholders in the grade level who have been identified as having poor engagement in school projects are

eligible to take part in the intervention program or project.

English learning materials for grade 5 learners was crafted through IAN Symbols. Basic lessons in English such as Subject and Verb Agreement were covered. The teacher-researcher crafted instructional material and activities using IAN Symbols to ensure mastery of the lessons.

For the Pre-Test and Post-Test, a teacher-made was used to assess the participants' performance. The Test consists of 20 items focusing on the Subject and Verb Agreement. Multiple Choice was the type of test.

The teacher-researcher asked permission from the School Head and parents of the learners to conduct the study. They also asked for validation from the School head and Master Teacher to verify the content of the instruments and materials used in the study.

After the monitoring, a post-monitoring was conducted to see their progress. The data collected in this study was organized and classified based on the research design and the problems formulated. 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:

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

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

N

Where: P=Percentage

F = Frequency

N = Sample Size

B. **Descriptive statistics:** Total

Weighted Average (mean) was used to answer the problem.

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

Where:

X = Mean

x = Individual Item

n = Number of Items

10-14	Average Proficient	5	12%
5-9	Low Proficient	31	74%
1-4	Not Proficient	6	14%
	Total	42	100%

Mean = 7.26

MPS = 36%

Table 2 This shows the frequency and percentage according to Pre-Test on performance level of Grade V respondents; 5 pupils or 12% got Average Proficient level, 31 pupils or 74 % got Low proficient, 6 pupils got Not Proficient. The Pre- Test shows that the MPS got 36%.

Table 3: Post- Test on Performance Level of Grade V-Gemini

Score	Description	Frequency	Percentage
18-20	Highly Proficient	12	29%
15-17	Proficient	19	45%
10-14	Average Proficient	11	26%
5-9	Low Proficient	0	0%
1-4	Not Proficient	0	0%
	Total	42	100%

Mean = 15.95

MPS = 80%

Table 3 This illustrates the frequency and percentage of improvements of Grade 5 learners in their performance, which reached 44% as compared in their pre-test and post test.

RESULTS

Table 1: Pre-test and Post-Test Grade 5 Performance Level

	Mean	MPS	Interpretation
Pre-Test	7.26	36%	Low Proficient
Post-Test	15.95	80%	Highly Proficient

Table 1 This illustrates the frequency and percentage of improvements of Grade 5 learners in their performance, which reached 44% as compared in their pre-test and post test.

Table 2: Pre- Test Performance Level of Grade V-Gemini

Score	Description	Frequency	Percentage
18-20	Highly Proficient	0	0%
15-17	Proficient	0	0%

DISCUSSION

Through the use of a teacher-made test that was approved by the Master teacher and the School head the study evaluated the grammar proficiency of the grade 5 learners. Based on the results of the pre-test, none of the participants was identified as Highly Proficient and Proficient. There were five (7) or 12% of the participants were identified as Average Proficient, thirty-one (31) or 74% and six (6) or 14% were Not Proficient.

After the implementation of Project IANs, a post-test was conducted and it was revealed that twelve (12) or 29%, were identified as Highly Proficient, nineteen (19) or 45% were identified as Proficient, eleven (11) or 26% and none were identified as Low Proficient or Not Proficient. Based on the results of the pre-test and post-test grammatical performance levels of the participants there is a significant difference revealing the improvement brought by the Project IANs. In addition, teachers must craft activities or instructional materials using IAN Symbols that will get the interest of the learners in learning English language.

Even though the researcher's goal of improving the learners' English performance was achieved in this study, additional concerns were raised. One of these is that some of the learners missed the lesson because of absenteeism or several reasons. This should be addressed as well because there are some of learners who still have low grammatical competence in another topic. Thus, the proponent wants to create additional English-language teaching materials employing IAN symbols as a teacher-researcher who is committed to assisting the

students. This will grab the interest of every student and increase their knowledge of the fundamentals of grammar. Therefore, teachers need to take action to help students' English grammar, which could also help them perform better academically.

After getting the findings of this study, the learners who participated were now beginning to appreciate the English language. They even wish to have more classes and activities using IAN Symbols to boost their performance in English. Teachers should create instructional materials using the IAN Symbols for their learners and in another subject too. Similar to the initiatives of the teacher-researcher, other teachers created and tried to implement intervention programs as well. These intervention programs were proposed as the teachers were also influenced to enhance the knowledge of the learners in other subjects and showcase their creativity

ACKNOWLEDGEMENTS

The researchers acknowledge the **Lord Almighty**, the origin of all wisdom and all the blessings, as the source of their life, professional, academic, and personal accomplishments. They expressed gratitude and admiration in full. They praised and thanked wholeheartedly.

They would like to express our sincere gratitude and appreciation to all the important individuals whose help, support, consideration, and care during the planning stages enabled us to finish this study;

Nenette M. Lacuarin, PhD, Principal II, Dela Paz Main Elementary School for her personal support and encouragement to pursue 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 input and motivation to enhance this study;

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

The **Grade five Teachers, Learners, and Parents** who participated in the study and contributed their time and effort, to provide the baseline data;

Through our family's love, support, inspiration, and unwavering moral guidance, we have been able to pursue higher academic goals throughout our professional development.

Again, to our **LORD JESUS CHRIST**, the researchers owe everything.

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