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Story Pyramid Approach: Improving Reading Comprehension Skills of Grade 6 Students: A Research Paper

Roselle V. Gagarin[1]

[1]Ilocos Sur Polytechnic State College

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Abstract: This study aimed to determine the effectiveness of the Story Pyramid Approach in improving the reading comprehension skills of Grade 6 students. It employed a pre-experimental one-group pretest-posttest design involving 43 Grade 6 learners (18 males and 25 females) of Saint Joseph's Institute, Inc., San Juan, Candon City, Ilocos Sur, during School Year 2025–2026. Pretest and posttest scores were gathered to measure learners' performance before and after the intervention. Mean, standard deviation, and paired-samples t-test were used to analyze the data. The results showed that the posttest mean score of 23.5 was higher than the pretest mean score of 15.0, with a reported mean difference of −8.47. The computed t-value of −27.4 and p-value of less than .001 indicated a statistically significant difference at the 0.05 level of significance. Thus, the null hypothesis was rejected. The findings indicate that the Story Pyramid Approach was effective in improving the reading comprehension performance of the Grade 6 learners.

Keywords: *Story Pyramid Approach; Reading Comprehension; Grade 6 Students; Pretest-Posttest; Graphic Organizer.*

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I. INTRODUCTION

The improvement of reading comprehension among the intermediate school is one of the most crucial elements for academic success and lifelong learning. Reading comprehension is one of the most essential communication skills, particularly in the study of English, as it serves as a foundation for learning and effective expression. It involves the ability to understand, analyze information, interpret, evaluate ideas from a text and apply knowledge effectively. Developing strong reading comprehension fosters higher order thinking skills that are essential in society.

In the 2025 Programme for International Student Assessment (PISA) reported that the Philippines obtained a mean reading score of 362 points, compared with the OECD average of 472 points. Furthermore, only 31% of Filipino 15-year-old students attained at least Level 2 proficiency in reading, compared with 69% across OECD countries. At this minimum level, students are expected to identify the main idea in a moderately long text, locate information based on explicit criteria, and reflect on the purpose and form of texts when explicitly directed to do so. The PISA 2025 results also showed that Philippine students' average reading performance was higher than in 2022; however, the results continue to indicate the need to strengthen reading proficiency among Filipino learners.

In the Philippine context, the Department of Education (DepEd) introduced Catch-up Fridays in response to the 2022 Program for International Student Assessment (PISA) results showing low reading comprehension among Filipino learners (DO No.013, s.2023). The Drop Everything and Read (DEAR) program activities, orientations, and feedback sessions strengthen foundational, social, and academic skills.

II. REVIEW OF RELATED LITERATURE

In response to these challenges, a study was conducted to address the reading comprehension skills of Grade 6 pupils in a public elementary school in the Division of Ilocos Sur, specifically in Gregorio Del Pilar, Philippines. Thirteen Grade 6 pupils who were struggling with low reading comprehension levels were selected (Orpilla, 2025) and participated for an intervention using the reading response journals approach, which aimed to enhance their comprehension skills over a three-month period. The study employed a one-group pretest-posttest design, measuring the participants' performance before and after the intervention.

Several studies highlight the importance of effective strategies to strengthen reading comprehension. Cervetti and Hiebert (2019) note that reading comprehension goes beyond decoding, requiring meaning-making, text analysis, and use of prior knowledge. Likewise, Kuhn and Pease-Alvarez (2020) stress that scaffolded strategies like graphic organizers

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enhance learners' comprehension. Villanueva (2018) found that graphic organizers improve students identify key details and summarize narratives.

Furthermore, many students struggled with poor comprehension skills when reading a story. Students often provided incomplete or irrelevant answers after reading, indicating difficulty in understanding the main ideas and details of a text. Faced with these obstacles and the urgent need to address this prevalent problem, the researcher implemented the Story Pyramid as an intervention to help students visually organize information and enhance comprehension skills.

The proposed intervention of implementing story pyramid represents an innovative approach to improving reading comprehension levels among Grade 6 students. Grounded in research-based practices and supported by literature on effective instructional strategies. This intervention offered a structured framework for higher order thinking skills, metacognitive awareness, and a deeper text understanding empowering students to become active and engaged readers who can comprehend and analyze texts with confidence and proficiency. Through collaborative efforts between educators, researchers, and policymakers, this intervention has the potential to contribute to meaningful improvements in students' reading comprehension abilities and overall academic success.

➢ *Statement of the Problem*

This study aims to investigate the effectiveness of the Story Pyramid Approach in improving the reading comprehension skills of Grade 6 students.

- What is the level of students' reading comprehension skills before and after the use of the Story Pyramid Strategy?
- Is there a significant difference in students' reading comprehension skills before and after using the Story Pyramid Strategy?
- What is the extent of improvement in the reading comprehension skills of the students?

III. METHODOLOGY

➢ *Research Design*

This study employed a pre-experimental one-group pretest-posttest research method. The one-group experimental research method is a type of experimental research design in which a single group of participants was exposed to the Story Pyramid intervention, and their performance was measured and compared before and after the treatment (Creswell, 2018).

➢ *Population and Locale*

The research involved (43) Grade VI pupils comprising of (18) males and (25) females of St. Joseph's Institute, Inc., San Juan, Candon Ciy, Ilocos Sur for the School Year 2025-2026. The study utilized the total enumeration technique, in which all Grade VI pupils of the institution served as respondents.

➢ *Research Instrument*

This study utilized a 30-item teacher-made test designed anchored on Bloom's Taxonomy's level of performance was used to measure reading comprehension skills of Grade VI pupils. The test items carefully developed in alignment with the Grade VI English curriculum and was content validated by a panel of experienced educators. A panel consisting of one Subject Area Coordinator in English, one Grade VI teacher, and one High School teacher major in English expertly validated the teacher-made-test to ensure its content validity. The validators evaluated the test for clarity, relevance, and alignment with the intended learning competencies. The computed content validity rating was 4.81, indicating that the instrument possessed very high validity.

The teacher-made test was pilot tested among (8) Grade VI pupils at St. Cecilia Early Learning Center, Inc., San Nicolas, Candon City, Ilocos Sur. Reliability was established. The pilot test results were subjected to reliability analysis, and the instrument yielded a Cronbach's alpha (α) of 0.799, indicating acceptable and internally consistent reliability, meaning the test items consistently measure reading comprehension. Thus, the instrument is reliable and suitable for use in the actual study.

Overall, the development, validation, and pilot-testing procedures ensured that the research instrument was both valid and reliable for assessing the reading comprehension skills of Grade VI learners. Two selected stories were used alongside the Story Pyramid to evaluate comprehension in recalling, interpreting, and synthesizing information.

➢ *Data Gathering Procedures*

In the conduct of this research, the researcher asked permission to the Saint Jopeh's Institute, Inc. through channels. After permission was granted to the researcher, the planned intervention will be implemented. The pre-test of this study was a 30-item teacher-made test to determine the reading level of the learners. After the learners undergone the intervention, lesson plans aligned with the Grade VI English curriculum were delivered, incorporating story pyramid strategies.

After the intervention period, the same test instrument was administered as a posttest to measure improvements in pupils' reading comprehension skills. The results of the pretest and posttest analyzed to determine the effectiveness of the intervention.

Mean, Percentage, standard deviation, and t-test was the statistical tools used in measuring the results of the tests.

➢ *Statistical Treatment*

The quantitative data collected from the pre-test and post-test was analyzed using descriptive statistics, particularly the such as mean, and standard deviation, to determine the level of students' reading comprehension skills before and after the use of the Story Pyramid Strategy. A paired samples t-test or, if necessary, a Wilcoxon signed-rank test will be employed to determine whether significant

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differences exist between the pretest and posttest results, depending on the normality of the data distribution. This statistical treatment provides a clearer understanding of the effectiveness of the Story Pyramid Approach in improving students' reading comprehension skills. In addition, effect size (Cohen's d) will be computed to measure the effect size and determine the extent of improvement in the pupils' performance.

➢ *Data Categorization*

To determine the level of students' reading comprehension skills before and after the use of the Story Pyramid Strategy, the following 5-point Likert scale will be used:

Table 1 Data Categorization

Rating	Statistical Limit	Descriptive Rating
5	24.01–30.00	Outstanding (O)
4	18.01–24.00	Very Satisfactory (VS)
3	12.01–18.00	Satisfactory (S)
2	6.01–12.00	Fair (F)
1	0.01–6.00	Poor (P)

➢ *Ethical Considerations*

In the process of determining the ethical research technique, several factors were considered. First, the study obtained informed consent, ensuring that participants were informed about the purpose of the research, their rights, and the possible outcomes. Second, students' identities will remain anonymous. Third, there was a case of voluntary participation, which meant that the participants could withdraw from the study if they so wished. Finally, protection was given to vulnerable individuals, particularly those with psychological conditions. These measures were implemented to safeguard participants' rights, maintain the validity of the study, and show respect for all participants.

IV. RESULTS AND DISCUSSIONS

This sub-part is the discussion and interpretation of the findings of this study with regards to the effectiveness of implementing Story Pyramid on the reading comprehension of Grade 6 students during the School Year 2025-2026. The ordering of the discussion of data results follows the research questions of the study.

➢ *Level of Reading Comprehension of Grade 6 Pupils Before and after the Exposure to the Story Pyramid.*

This study is concerned on determining the performance level of the forty-three (43) Grade 6 pupils before and after being exposed with the use of the teaching strategy called as story pyramid. The performance is assessed particularly the such as mean, and standard deviation.

Table 2 Performance Level of Grade 6 Learners Before and After Exposure to the Story Pyramid Approach

Score Interval	Descriptive Level	Pretest f	Pretest %	Posttest f	Posttest %
24.01–30.00	Outstanding	0	0%	14	32.56%
18.01–24.00	Very Satisfactory	5	11.63%	29	67.44%
12.01–18.00	Satisfactory	28	65.12%	0	0%
6.01–12.00	Fair	10	23.26%	0	0%
0.01–6.00	Poor	0	0%	0	0%
Mean		15.0		23.5	
Level of Performance		Satisfactory		Very Satisfactory	
Standard Deviation		2.79		2.16	

Table 2 shows Performance Level on reading comprehension in English of grade 6 pupils before and after the exposure to the story pyramid approach using pre-test and post-test.

From the table, one can gleaned that in both tests, there are thirty (30) items was given. Also, before exposure to the story pyramid approach, the mean score obtained by the participants was 15.0, which corresponds to a Satisfactory level of performance. The computed standard deviation of 2.79 also suggests a wider variability in the learners' scores, indicating that their performance levels differed considerably before the intervention.

Moreover, from the same table, one can see that in post-test which measures the level of performance on reading comprehension of the learners after exposure with the story pyramid, the mean score increased to 23.5, which corresponds to a Very Satisfactory level of performance. The standard deviation decreased to 2.16, showing more consistency in learners' performance compared to the pretest.

The frequency distribution also reflects this improvement: before exposure, most learners 65.12% scored within the Satisfactory range, while after exposure, the majority 67.44% scored in the Very Satisfactory range, and 32.56% reached the Outstanding category.

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Based on the table, there is a notable increase in the Mean of the post-test after the utilization of the story pyramid approach in reading comprehension among Grade 6 learners.

This finding aligns with the study by Nordin et al. (2022), which emphasized that strategies like story pyramids help learners identify key story elements, leading to improved comprehension.

- *Significant Difference Between the Level of Reading Comprehension Among Grade 6 Pupils Based on their Pretest and Post-Test.*

Table 3 shows the differences between the level of reading comprehension performance of the Grade 6 learners based on their pre-test and post-test using a t-test.

Table 3 T-Test on the Difference of the Level of Performances of Grade 6 Based on their Pre-Test and Post-Test

Test	Mean	Mean Difference	df	t-value	p-value	Remarks
Pretest	15.0	−8.47	42	−27.4	< .001	Significant
Posttest	23.5					

Table 3 shows the results of the paired samples t-test between the pretest and posttest scores in English among the Grade 6 students. As shown in the table, the posttest scores are substantially higher than the pretest scores, with a mean difference of −8.47. The computed t-value −27.4 and p-value < .001 indicate that the difference is statistically significant at the 0.05 significance level. Therefore, the null hypothesis that there is no difference between the pretest and posttest scores is rejected.

This finding is similar to the analysis made by Elleman and Oslund (2019) in their study which emphasizes the use of effective intervention strategy to address the reading challenges among students. Results from the intervention were promising, as the majority of Grade 6 learners improved their reading comprehension from the pre-test to the post-test, demonstrating higher accuracy in understanding texts. Many students progressed from a Satisfactory to a Very Satisfactory level, while some even reached the Outstanding level, indicating a significant positive impact of the story pyramid approach on their reading abilities.

- *The Extent of Improvement in the Reading Comprehension Skills of the Grade 6 Pupils Based on their Pretest and Post-Test.*

Table 4 shows the extent of improvement in the reading comprehension skills of grade 6 pupils before and after the exposure to the story pyramid approach using pre-test and post-test.

Table 4 Extent of Improvement in the Reading Comprehension Skills of Grade 6 Pupils based on their Pre-test and Post-test

Measure	Mean	SD	Mean Difference	95% CI of Difference	t-value / W	df	p-value	Effect Size	Interpretation
Pretest	15.0	2.79	−8.47	−9.09 to −7.84	t = −27.4 / W = 0.00	42	< .001	Cohen's d = −4.17	Significant improvement
Posttest	23.5	2.16							

Table 4 shows the results of the paired samples t-test show a significant improvement in their reading comprehension skills after the implementation of the Story Pyramid Strategy. The mean score increased from 15.0 in the pre-test to 23.5 in the post-test, resulting in a mean difference of 8.47 points.

The paired samples t-test confirmed that this improvement is statistically significant, $t(42) = -27.4$, $p < .001$, indicating that the observed increase in scores is unlikely to have occurred by chance. The 95% confidence interval for the mean difference –9.09 to –7.84 further supports the reliability of this improvement. The Wilcoxon signed-rank test also confirmed the significance of the gain $W = 0.00$, $p < .001$, validating the result under non-parametric conditions.

The effect size Cohen's d = –4.17 suggests an extremely large and meaningful improvement, demonstrating that the Story Pyramid Strategy had a very strong positive impact on the students' reading comprehension performance. Overall, these results show that the story pyramid strategy effectively enhanced the pupils' ability to understand and interpret texts, reflecting a significant development in their reading skills.

This finding aligns with the study by Ahmed (2022) reported that implementing the strategy led to a significant improvement in students' reading comprehension scores, indicating that structured story activities facilitate understanding of key story elements. Similarly, Astuti (2020) found that the use of graphic organizers significantly enhanced learners' comprehension performance, as students were able to organize and reflect on textual information more effectively. These studies corroborate the present findings, where Grade 6 pupils showed substantial improvement in reading comprehension after the exposure to the story pyramid strategy, as reflected by significant t-test results, a large effect size, and a notable increase in mean scores from pre-test to post-test.

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V. CONCLUSIONS AND RECOMMENDATIONS

➢ *Based on the Study, it is Concluded that the Story Pyramid Approach is an Effective Strategy in Improving the Reading Comprehension Skills of Grade 6 Pupils.*

- Level of Reading Comprehension Before and After the Strategy. The learners' reading performance level progressed from Satisfactory in the pre-test to Very Satisfactory in the post-test, indicating that the story pyramid approach had a positive effect in improving Grade 6 students' reading comprehension skills.
- Significant Difference Before and After the Strategy. The paired samples t-test revealed a statistically significant difference between the pre-test and post-test scores leading to the rejection of the null hypothesis. This result suggests that the story pyramid approach exerted a substantial difference on the students' English performance. The notable improvement reflects meaningful progress in their skills, indicating increased achievement following the implementation of the intervention.
- Extent of Improvement in Reading Comprehension. The Story Pyramid Strategy had a strong and meaningful impact on the learners' reading comprehension. The significant improvement suggests that the story pyramid approach effectively supported learners in organizing, understanding, and interpreting text.

Overall, the study concludes that the Story Pyramid Approach substantially improved the reading comprehension performance of Grade 6 learners and is therefore an effective tool for classroom instruction

➢ *Based on the Conclusions Drawn, the Following Recommendations are Offered:*

- The teacher should utilize innovative and interactive strategies such as integrating the Story Pyramid Strategy into Regular Reading Instruction to strengthen learners' reading comprehension and other language skills. Expanding its use across different text types and grade levels can help reinforce students' ability to understand and organize information in various reading contexts.
- The school administrators should continuously encourage teachers to participate in seminars, training, capacity-building activities and workshops on modern, innovative, and interactive language strategies such as Story Pyramid Strategy. Providing contextualized learning materials and support will help ensure consistent and meaningful application in the classroom.
- Strengthening the implementation through monitoring to maximize the impact of the strategy, regular monitoring and evaluation should be conducted to assess learners' progress and identify areas for improvement. Future studies may also explore the long-term effects of the Story Pyramid, its use in other grade levels. Future researchers are encouraged to conduct further studies related to reading comprehension using other types of graphic organizers to better determine their effectiveness.

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