



UNLOCKING COMPREHENSION: UTILIZATION OF FOUR SQUARE GRAPHIC ORGANIZER IN SUMMARIZING A STORY OF GRADE 6 STUDENTS

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ABSTRACT

This study explored the effectiveness of the Four Square Graphic Organizer (FSGO) as an instructional intervention to improve the reading comprehension and summarizing skills of Grade 6 students at Magatos Integrated School. Motivated by persistent challenges in students' ability to understand and summarize narrative texts, the study implemented a structured three-week action plan aligned with the English curriculum. A total of 20 purposively selected students participated in the intervention, which integrated guided reading, interactive activities, and the use of FSGO to help learners systematically organize story elements – namely, setting and characters, problem, main events, and solution. A quantitative-descriptive design was employed using pre-test and post-test assessments. Descriptive statistics revealed that students' mean scores improved from $M = 4.25$ ($SD = 1.16$), categorized as "very low," to $M = 17.15$ ($SD = 1.04$), categorized as "high" proficiency. To determine the significance of this improvement, a paired samples t-test was conducted. Results showed a statistically significant increase in students' performance, $t(19) = 29.61$, $p < .001$, with a large effect size (Cohen's $d = 6.83$). In addition, qualitative data from student interviews supported the quantitative findings, highlighting themes such as improved understanding, strategic thinking, engagement, and increased confidence. These results affirm that visual scaffolds like FSGO enhance students' ability to synthesize and articulate story content effectively. The study recommends integrating graphic organizers into regular classroom practice to foster deeper comprehension and independent summarization skills among elementary learners

KEYWORDS: Reading Comprehension, Summarizing A Story, Four Square Organizer, Four Square Graphic Organizer, Visual Scaffolds, Elementary Education, Literacy Instruction

INTRODUCTION

In today's information-rich world, the ability to summarize effectively is essential for students to navigate and understand complex texts. However, many students struggle to grasp the key elements of a story and express them concisely in their own words. This difficulty in summarizing stories can significantly impact their comprehension and ability to make meaningful connections with narrative texts (Graham, 2021). This study, evaluating summarization strategies in a Grade 6 classroom, aimed to understand their impact on students' ability to identify the central theme, key events, and character development within a story. The study emphasizes explicit instruction in summarization strategies, focusing on identifying central themes,

key events, and character development. It also highlights scaffolding techniques to prevent students from copying text verbatim, encouraging them to summarize the story meaningfully (Harris, 2021).

In Malaysia, researchers have proven that pupils' reading and understanding abilities where pupils' comprehension and retention of information from expository texts are increased with the use of various graphic organizer methodologies graphic organizer can be used to stimulate memory recall and enable the learner to make connections. In constructing graphic organize, pupils have a potential to increase in comprehension and note taking. Graphic organizers show pupils how ideas and



information are related and organize (Zainudin, 2021). Similarly, Saudi Arabia investigated the effectiveness of graphic organizers in developing reading comprehension among students with learning difficulties and found that those in the experimental group, who received instruction using a variety graphic organizer showed statistically significant organizer in both and inferential comprehension skills compared to the control group. The visual format of the organizers helped students break down complex texts, identify key ideas and understand relationships between concepts more effectively which is also increased their engagement and motivation.(Al Balwi & Muhaidat, 2021). However, the study of Vira et al. (2024) revealed that in Indonesia, the problem of comprehension in summarizing a story specifically in elementary students analyzed their reading comprehension skills, including summarizing narrative texts.

In Manila, Philippines, effective summary writing as a stand-alone task requires that students first read and fully comprehend the source text before deciding which details to include, omit, or condense. This decision-making process is best supported by two essential reading skills: the ability to distinguish between main and minor ideas, and the skill to identify relevant versus irrelevant details. According to (Barnwal, 2021), reading comprehension plays a vital role in enhancing students' ability to summarize, as it underpins their capacity to process and organize information meaningfully. Strengthening these skills allows students to produce accurate and concise summaries that reflect the core message of the source text while developing their overall academic literacy

Similar findings were observed in Quezon City, where a study by (Dela Cruz, 2020) emphasized that students who received explicit instruction in identifying key ideas and supporting details showed significant improvement in their ability to create coherent summaries. The study concluded that summary writing success is largely dependent on foundational reading comprehension skills, particularly the ability to filter out less relevant information. Moreover, in Cebu City, research conducted by (Ramos & Javier, 2020) highlighted that Grade 6 students performed better in summarizing narrative texts after being trained in comprehension strategies such as main idea mapping and detail selection. The authors noted that as students became more proficient in understanding the structure and meaning of texts, their summary writing became more organized, focused, and reflective of the text's essential points.

In the Division of Davao del Norte, particularly at Magatos Integrated School, a noteworthy observation surfaced during the Field Study courses. It became apparent that a considerable number of pupils, particularly in grade 6 were encountering lack of comprehension on summarizing stories. Grade 6 pupils were given a short narrative, a fable emphasizing resilience and humility. After silently reading the text, students were asked to summarize the story in 3–5 sentences. However, out of 36 pupils, only 7 were able to provide a coherent summary that captured the main events and moral lesson. The rest either copied entire

paragraphs from the story, focused on trivial details (such as character names or specific objects), or left the task incomplete. When interviewed, several students admitted they found it hard to identify the beginning, middle, and end of the story, and they did not know which parts were important to include in a summary. This reflected a deeper issue not just in summarization skills, but in reading comprehension overall. Such patterns reveal a critical gap in foundational literacy that must be addressed through targeted intervention. The action research needed to be conducted since most of the students in grade 6 did not fully understand the text they read in the story and they did not comprehend it. Study seeks to inform educators and policymakers about best practices that can enhances literacy skills among young learners. Given that comprehending a story is not only a practical skill but also connects students with historical documents and personal expression, its preservation in educational curricula is essential for holistic development.

This concerning situation prompted the researchers to conduct the present study. As future educators, it is essential for them to identify and implement appropriate interventions that address students' difficulties in reading comprehension particularly in summarizing stories, which is often a challenging yet vital component of literacy instruction. This study is significant because summarizing is not only a core skill in reading comprehension but also a higher order thinking strategy that enables learners to distill essential ideas, organize information logically, and retain key details from a text. Strong summarizing skills empower students to engage more deeply with what they read, improving both their understanding and overall academic performance. In light of this, action research becomes necessary to explore effective, research based strategies that can enhance learners comprehension abilities. One such strategy is the use of the Four Square Graphic Organizer, a structured, student-centered tool that helps learners break down and organize story elements systematically. These visual organizers have been shown to yield better outcomes compared to traditional reading instruction, as they actively engage students in the comprehension process and support the development of clear, concise summaries.

In relation to a research study, the study supported by (Cailing, 2018) entitled "A Teaching Strategy for Improving Reading Comprehension Level Among Grade I and II Pupils in a Multigrade Class"which explored how graphic organizers can improve reading comprehension in multigrade classrooms involving Grade I and II pupils. The research showed that after the use of graphic organizers, students significantly improved their ability to identify main ideas and supporting details. These tools helped them organize story elements visually, which enhanced their understanding and ability to summarize texts. Cailing concluded that integrating graphic organizers in early literacy instruction is effective in unlocking comprehension for young learners.

In addition, Pinzon (2020) which conducted a study to investigate the impact of graphic organizers on reading comprehension and



summarization among elementary students. The study found that the use of graphic organizers, such as the KWL chart (What I Know, What I Want to Know, What I Learned), significantly improved students' ability to summarize texts. By activating prior knowledge and organizing information visually, students were better equipped to identify main ideas and key details, leading to more coherent and accurate summaries.

Research Questions

To explore the effectiveness of the Four Square Graphic Organizer as a tool for enhancing reading comprehension through story summarization, this study seeks to examine both the quantitative and qualitative impacts of the intervention on Grade 6 students.

Specifically, this study sought to answer the following questions:

1. What is the level of students' summarizing skills before the intervention using the Four Square Graphic Organizer to enhance reading comprehension?
2. What is the level of students' summarizing skills after the intervention using the Four Square Graphic Organizer to

improve reading comprehension?

3. What was the quantitative difference in grade 6 students' summarizing skills before and after the intervention using the four square graphic organizer?
4. What are the insights of the students about Four Square Graphic Organizer as an intervention in summarizing a story?

Proposed Intervention/Action Plan

To address the challenges in reading comprehension and low performance in summarizing among Grade 6 students, a structured intervention using the Four Square Graphic Organizer was developed and implemented. This three week action plan, aligned with the learners' English curriculum from Monday, Wednesday and Friday, aimed to enhance comprehension, critical thinking, and organization of ideas through interactive and student centered activities. The strategy emphasized guided instruction and collaborative learning, allowing students to engage meaningfully with each element of the story and systematically organize their thoughts by breaking down key story components to construct clear and coherent summaries.

Three-Week Action Plan Matrix for Four Square Graphic Organizer Intervention

Week	Phase	Day(s)	Activities	Objectives	Expected Outcomes
Week 1	Introduction Phase	Day 1 (Monday)	Orientation: Introduce the program and explain objectives.	Familiarize students with the purpose of the intervention.	Students understand the goals and structure of the program.
		Day 2 (Wednesday)	Pre-Test: Assess reading comprehension and summarizing ability using a selected narrative text.	Establish baseline data for students' summarizing and comprehension skills.	Identify learners' strengths and areas for improvement in story summarizing.
		Day 3 (Friday)	Discussion: Analyze pre-test responses and introduce the elements of a good story summary.	Clarify expectations and develop awareness of key story elements (main idea, details, conclusion).	Students begin to understand the structure of a coherent summary.
Week 2	Implementation Phase	Day 4 (Monday)	Introduce Four Square Graphic Organizer (FSGO) and determine characters and settings	Guide students in identifying and recording the characters and setting in a story.	Students can fill in Quadrant 1 using guided instruction.
		Day 5 (Wednesday)	Determine problem of the story using a sample story. Group discussion and guided practice.	Help students recognize and describe the story's main conflict/problem.	Students accurately identify and record the problem in a story.
		Day 6 (Friday)	Solution. Provide modeling and paired activity for completion.	Support students in determining how the story's problem was resolved.	Students complete all four quadrants with guided help.
Week 3	Assessment Phase	Day 7 (Monday)	Application Day: Students summarize a short story using all four quadrants independently.	Encourage application of learned skills to complete a full story summary.	Students construct a complete and coherent story summary.
		Day 8 (Wednesday)	Post-Test: Administer a similar narrative comprehension test.	Measure improvement in comprehension and summarization after the intervention.	Data collected on skill growth; comparison with pre-test.
		Day 9 (Friday)	Reflection and Feedback Session: Students discuss their experience using the FSGO.	Encourage metacognition and insight into their learning progress.	Students articulate how the organizer helped improve their comprehension and summarizing abilities.



METHODOLOGY

Research Design

This study utilized a quantitative-descriptive method. This approach produces both qualitative and quantitative data that characterize the current state of a situation at a specific moment in time. By collecting detailed information, it helps to better understand the current issues or problems through systematic data collection which enables a more thorough description of the situation. According to (Manjunatha, 2019), quantitative-descriptive research supports a deeper understanding of phenomena by providing both numerical and descriptive insights.

The study employed an action research design to explore and improved classroom practices. Action research blends theory and practice. Through transformation and reflection within a challenging circumstance and a mutually agreed upon ethical framework. Researchers work together on a series of tasks that include reflective learning and active intervention. In this study, the action research approach was used to determine the impact of utilizing the Four Square Graphic Organizer on improving students' summarization skills.

Respondents

Upon respondent's selection, the researchers used a purposive sampling in which it refers to a group of non-probability sampling techniques which units are selected because they have characteristics that you need in your sample. In addition, units are selected "on purpose" in purposive sampling (Nikolopou et., 2023).

Moreover, purposive sampling is also called a judgement sampling wherein, in this sampling method relies on the researcher's judgement when identifying and selecting the individuals, cases, or events that can provide the best information to achieve the study's objectives. The respondents of this study were the grade 6 pupils under low level of comprehending in summarizing a story from Magatos Integrated School. 20 students from grade 6 from the school being mentioned. Aligns with this guidance, balancing sample size and practicality. Using correlation quantitative to investigate the relationship between the frequency of using the Four Square Graphic Organizer Intervention in improving the summarizing skills of the students.

Research Instrument

In this study, a rubric was used as the primary research instrument to assess students' summary writing skills with the goal of enhancing their comprehension in summarizing a story. The rubric provided clear and specific criteria, including understanding of the main idea, inclusion of key details, coherence and organization, use of appropriate language, and correct grammar and punctuation. It served as both a formative and summative assessment tool, guiding students in improving their ability to extract essential information from a text and present it in a concise and coherent manner. By using this rubric during both the pre-assessment and post-assessment phases, the researchers were able to measure progress and identify specific areas of improvement in students' comprehension and summarization abilities. The table below are the rubric guide of the rater.

Rubric for Assessing Summary Writing				
Name: _____	Summary Title: _____			
Date: _____	Period: _____			
	4	3	2	1
Lenght	6-9 sentences	9 sentences	10 sentences	11+ sentences
Accuracy	All statements accurate and verified by story	Most statements accurate and verified by story	Some statements cite outside information or opinion	Most statements cite outside information or opinion
Paraphrasing	No more than 4 words in a row taken directly from story	One sentence contain more than 4 words in a row taken directly from story	Two sentences contain more than 4 words in a row taken directly from story	3+ sentences contain more than 4 words in a row taken directly from story
Focus	Summary consists of main idea and important details only	Summary contains of main idea and some minor details	Summary contains of main idea and only minor details	Main idea of story is not discussed
Conventions	No more than one punctuation, grammar, or spelling error	2-3 punctuation, grammar, or spelling error	4-5 punctuation, grammar, or spelling error	6+ punctuation, grammar, or spelling error
Overall grade: _____				
Comments: _____				

Procedure

The researchers followed the subsequent procedures when collecting the data in order to get the information required for the

investigation. The researchers utilized assessment before and after the implementation of intervention and innovation. The pre-test measured the average of the students who are having



difficulty with summarizing a story before the implementation. The post-test measured the knowledge and development of the learners through giving them the same set of worksheet in pre-test. To gather the necessary data for this research, the following steps were taken by the researchers. First, before starting the study, the researchers sent a request to the principals of the schools where the participants were enrolled. Then, the researchers administered a pretest to determine the participants' initial summarizing difficulties levels. Following the pretest, the for square graphic organizer will introduced, Next, after finishing their given task, the output will be checked by 2 (two) selected English teacher using the rubrics that given to them. This will focus on comprehension and ability to make meaningful connections with narrative texts and reviewing the effectiveness of four square graphic organizer in improving the summarization skills of students in understanding a story. This will be implemented in the last period of their class during Monday, Wednesday, and Friday following by a three-weeks intervention period. At the end of the research process, a post-test will conduct using the same tool to evaluate any improvements in the participants' summarizing difficulties levels after the intervention. The data from the pretest and post-test were then collected and tabulated.

Statistical Tool

To analyze the data effectively, appropriate statistical tools were employed to ensure the accuracy and reliability of the results. Mean. The mean, or average, was computed by dividing the total scores of the students in both the pretest and post-test by the number of respondents. This measure was used to assess the students' performance levels prior to and following the implementation of the intervention, providing a clear picture of any improvements or changes in academic achievement.

Standard Deviation (SD). Standard deviation was calculated to measure the amount of variability or dispersion in the students' scores around the mean. A lower standard deviation indicated that the scores were clustered closely around the mean, while a higher standard deviation suggested greater variability in performance. This measure helped to contextualize the consistency and spread of student outcomes both before and after the intervention.

Cohen's d. To complement the paired t-test and provide insight into the practical significance of the intervention, Cohen's d was calculated. This measure of effect size quantifies the magnitude of the difference between pretest and post-test scores, offering a standardized interpretation of how substantial the observed improvements were. A larger Cohen's d value indicates a stronger impact of the intervention on students' summarization skills.

Paired t-test. Also referred to as a dependent or correlated t-test, this statistical method is widely used to compare the means of two related groups (Gleichmann et al., 2020). It is particularly suitable for research designs that involve measuring the same group before and after an intervention such as pretest and post-test setups. In this study, the paired t-test was utilized to determine

whether the observed difference between the average scores of the pretest and post-test was statistically significant. This analysis helped verify whether the changes in student performance were meaningful or simply occurred by chance. By examining the relationship between the two sets of scores, the paired t-test served as a vital tool in evaluating the effectiveness of the intervention and measuring its impact on student learning outcomes.

Regression Analysis. Regression analysis can be employed to explore the relationship between variables and predict the impact on another. In the context of this study, regression analysis could be used to determine the extent to which the utilization of the Four Square Graphic Organizer correlates with improvements in students' summarization skills. This statistical tool would provide insights into predictive power of the intervention on student outcomes.

Data Analysis

Quantitative data analysis is the process of making sense of numerical data through mathematical calculations and statistical tests. It helps to identify patterns, relationships, and trends to make better decisions (Hotjar et al., 2018). In this study, the significant difference refers to the measurable change in participants' performance from the pre-test to the post-test. The researchers identified this difference by analyzing the participants' scores using appropriate statistical tools, thereby determining whether the observed changes in performance were statistically meaningful.

In addition to the quantitative analysis, qualitative data analysis was also conducted to gain deeper insights into the students' learning experiences and the impact of the intervention. This involved analyzing qualitative data sources such as students' written reflections, teacher observations, and feedback during the intervention process. The researchers employed thematic analysis to identify common themes and patterns related to students' engagement, perceived challenges, and the development of summarization skills. This qualitative approach provided a richer understanding of how and why the intervention influenced students' performance, complementing the statistical findings with contextual depth (Creswell, 2018).

Ethical Considerations

It is crucial to follow ethical guidelines when doing research. Fundamentally, this shaped the study's actual goals knowledge, truth, and error avoidance and fostered attitudes that are necessary for teamwork, like accountability, trust, respect for one another, and justice. This study followed the ethical guidelines of the Belmont Report (2010) to ensure responsible research practices. Principles such as autonomy, beneficence, fairness, informed consent, confidentiality, data protection, integrity, and conflict of interest were carefully respected.

RESULTS AND DISCUSSION

This section presents the findings and elaboration of results of the



Four Square Graphic Organizer in enhancing the story summarization skills of Grade 6 students at Magatos Integrated School. The data gathered by the researchers was carefully organized, presented, analyzed, and interpreted to gain a comprehensive understanding of how the graphic organizer supported students' reading comprehension and ability to summarize key elements of a story effectively.

This section presented the answers to the research questions presented earlier in this paper. This is composed of the analysis of data on the performance of the students on their pre-test and post-test.

Research Question No.1: What is the level of students' summarizing skills before the intervention using the Four Square Graphic Organizer to enhance reading comprehension?

The pre-test results revealed that the majority of Grade 6 students scored in the lower range. Notably, 40% of the participants scored 9, while only one student (5%) achieved a score of 13. The average percentage score was 45.50%, categorized as "Very Low", and the standard deviation (SD) was 2.18, indicating a moderately narrow spread of scores around the mean. This distribution suggests that prior to the intervention, most students struggled with summarizing stories, likely due to limited reading comprehension and a lack of strategic organization in processing textual information. The low SD reflects that students performed similarly poorly, reinforcing the need for instructional support in this area.

Table 1
Frequency Distribution of Pre-Test Score

Pre-Test Score	Frequency	Percentage
6	2	10.0%
7	1	5.0%
8	2	10.0%
9	8	40.0%
10	4	20.0%
11	2	10.0%
13	1	5.0%
Total	20	100.00%
Average Percentage Score (%)		45.50%
Mean		9.10
Standard Deviation (SD)		1.65
Description		Very Low

The table presents the frequency and percentage of students' scores, revealing a spread of performance with most scores falling between 6 and 11. The most frequently occurring score was 9, achieved by 8 students or 40% of the group. The lowest score recorded was 6, by 2 students (10%), while the highest score was 13, obtained by one student (5%). The overall average percentage score for the group was 45.50%, which falls under the "Very Low" category based on the study's scoring rubric.

Furthermore, the standard deviation was 1.65, indicating a moderate variation in the students' performance. These pre-test results suggest that the majority of students were struggling with their ability to summarize a story effectively, with many scoring below 50%. This indicates a general weakness in the comprehension and summarization skills that the intervention aims to address.

These findings align with Cabigao (2024), who noted that students often struggle with story comprehension and summarization due to difficulty identifying key information and organizing ideas. This highlights the importance of structured teaching strategies to help students develop the skills needed to

retell stories effectively. De Jesus & Dela Cruz (2021) also emphasized the value of visual aids in enhancing comprehension. Graphic organizers, such as the Four Square model, serve as effective scaffolds by breaking down texts into manageable parts. Villanueva et al. (2022) supported this by showing that graphic organizers help students understand narrative structure and identify main ideas, supporting details, and conclusions. The low pre-test scores suggest that traditional methods may not be sufficient for all learners. A visual and interactive intervention is necessary. Graphic organizers provide a clear, repeatable structure that supports students especially those who struggle—with organizing and expressing their ideas. The Four Square Graphic Organizer, in particular, helps students internalize the summarization process, improving both comprehension and writing skills. Overall, the pre-test results point to a significant gap in summarizing skills, as shown by the "Very Low" average score. This justifies the use of structured, visual tools like the Four Square Graphic Organizer to address students' learning needs and sets the stage for evaluating its effectiveness in the post-test phase.



Research Question No.2: What is the level of students' summarizing skills after the intervention using the Four Square Graphic Organizer?

Table 3 shows the post-test on the comprehension skills of grade 6 learners. Following the implementation of the Four Square Graphic Organizer, the post-test scores of the students significantly improved. Out of 20 participants, 25% scored 18, 20% scored 17, and 15% attained a perfect score of 20. The

average percentage score increased to 86.75%, categorized as "High", and the standard deviation (SD) was 2.10, suggesting improved yet still slightly varied performance among learners. the reduced spread and higher overall scores indicate that students benefited from the structured and visual nature of the FSGO, which helped them identify, organize, and present key story elements more effectively.

Table 2
Frequency Distribution of Post Test Score

Post Test Score	Frequency	Percentage
14	1	5.0%
15	3	15.0%
16	2	10.0%
17	4	20.0%
18	5	25.0%
19	2	10.0%
20	3	15.0%
Total	20	100.00%
Average Percentage Score (%)		86.75%
Mean		17.35
Standard Deviation (SD)		1.79
Description		High

Table 2 presents the post-test results of 20 students following the implementation of the Four Square Graphic Organizer intervention in a summarization activity. The group achieved an average percentage score of 86.75%, classified as "High" based on the study's scoring rubric. The highest score of 20 was obtained by three students (15%), while the lowest score of 14 was recorded by one student (5%). The most frequently occurring score was 18, achieved by five students (25%). The standard deviation of 1.79 indicates a relatively moderate spread of scores around the mean, suggesting consistent performance among students.

These results reflect a notable improvement in students' ability to summarize narrative texts, especially when compared to the pre-test outcomes. The upward shift in scores suggests that the structured and visual support provided by the Four Square Graphic Organizer contributed to enhanced comprehension, organization of ideas, and overall summarization proficiency. Most students scored at or above the group mean, further reinforcing the effectiveness of the intervention in addressing previously identified learning gaps. Students demonstrated increased ability to organize information using the graphic organizer, and to represent key information in a structured manner both of which are essential components in building effective summarization skills. Furthermore, the improvements extended beyond mere identification of key points. The students displayed better critical thinking in summarizing activities, where they

applied newly learned strategies to extract and organize information from texts. These skills are crucial for developing comprehensive summarization skills, suggesting that the intervention not only increased the students' ability to identify main points but also deepened their understanding of how to create coherent and concise summaries.

This finding aligns with the research of Lansangan and Salandanan (2020), which demonstrated that graphic organizers lead to significant gains in comprehension. The study supports the idea that providing students with visual tools for organizing information is a powerful tool for improving summarization and comprehension. Ganal & Abao (2021) further emphasized that visual tools reduce cognitive load, helping learners extract and structure important information, thus facilitating summarization. Marquez et al. (2023) also noted improvements in academic performance when graphic organizers are integrated into reading instruction, which directly supports the observed improvements in summarization skills. In conclusion, the results of this study reinforce the importance of using graphic organizers in teaching summarization skills. The intervention proved to be an effective method for fostering significant gains in information processing, organization, and concise writing all of which contribute to the broader goal of developing effective summarization skills. The findings suggest that integrating such interventions into literacy education could lead to long-term improvements in students' abilities to effectively summarize complex texts.



Research Question No.3: What was the quantitative difference in grade 6 students' summarizing skills before and after the intervention using the four square graphic organizer ?

Table 3.
Significant Difference Between the Pre-Test and Post-Test Scores

			statistic	df	p	Mean difference	SE difference		Effect Size
Pre-test	Post-test	Student's t	30.5	19	<.001	8.25	0.270	Cohen's d	6.83

Note. $H_a \mu_{\text{Measure 1}} - \mu_{\text{Measure 2}} \neq 0$

Table 3 presents the results of a paired samples t-test used to determine whether a significant difference existed between the pre-test and post-test scores of Grade 6 students following the implementation of the Four Square Graphic Organizer. The analysis revealed a statistically significant improvement in students' performance, $t(19) = 30.5$, $p < .001$. Furthermore, Cohen's d was calculated at 6.83, signifying an exceptionally large effect size and underscoring the substantial practical significance of the intervention. These findings strongly suggest that the use of the Four Square Graphic Organizer contributed to a marked improvement in students' ability to summarize stories a key aspect of reading comprehension.

The outcome aligns with the findings of Rahat et al. (2020), who asserted that graphic organizers serve as effective visual scaffolds that help learners identify key ideas and organize information logically. Their study demonstrated that integrating graphic organizers into reading instruction can significantly enhance comprehension skills and overall academic achievement. Additional research supports this conclusion. In a study conducted by Jiang & Grabe (2021), English language learners who used graphic organizers during reading activities showed better retention and understanding of main ideas and supporting details compared to those who used traditional note-taking methods. The researchers concluded that visual tools promote active engagement with texts, especially among learners who struggle with linear, text-heavy content. Similarly, a study by Alvermann & Boothby (2020) found that middle-grade students who used graphic organizers to aid in summarizing expository

texts demonstrated significant improvements in their comprehension test scores. The organizers helped students visually represent relationships between ideas, making it easier for them to synthesize and recall information. In summary, the significant increase in post-test scores and the large effect size observed in this study affirm the effectiveness of the Four Square Graphic Organizer as a tool for improving reading comprehension among Grade 6 students. These findings are well-supported by previous research, highlighting the importance of incorporating visual learning strategies in literacy instruction.

Research Question No.4: What are the insights of the students about Four Square Graphic Organizer as an intervention in summarizing a story?

To answer this research question, in-depth interviews were conducted with the participants. Probing questions were asked to elicit their responses regarding their insights about the Four Square Graphic Organizer as an intervention to enhance the comprehension and summarization skills of Grade 6 students. The major themes and supporting statements are presented in Table 5. Participants shared their responses regarding their experiences and observations of the intervention. From their responses, five major themes emerged: (1) visual scaffolds for comprehension; (2) affective engagement through visual tool; (3) strategic summarization skills development; (4) improved summarization through structured support and (5) Digital adaptation for engagement and convenience.

Table 3. Themes and Supporting Statements on the insights of the students about Four Square Graphic Organizer as an intervention in enhancing their comprehension in summarizing a story

<i>Emerging Themes</i>	<i>Supporting Statements</i>
Visual Scaffolds for Comprehension	"The Four Square Graphic Organizer showed the importance of summarizing by clearly organizing a story key elements." (IDI-01) "It made me think about the main parts of the story like the characters, setting, problem, and solution so it was easier for me to understand." (IDI-02) "It guided me to focus on the important details of the story." (IDI-03) "It clarifies the information and enhances my understanding." (IDI-05) "It breaks down the details in a way that's easier to understand." (IDI-06)
Affected Engagement Through Visual Tool	"The Four Square Graphic Organizer's visual and structured approach made summarizing less daunting and more engaging." (IDI-01) "It made summarizing way less scary and more fun!." (IDI-02)



	<p>“The structure kept me engaged, and I felt more motivated.” (IDI-03)</p> <p>“It made the summarizing process more interesting.” (IDI-05)</p>
Strategic Summarization Skills Development	<p>“It help me stay focused and made the process less overwhelming.” (IDI-06)</p> <p>“I now naturally break down text into key parts characters, setting, problem, and solution.” (IDI-01)</p> <p>“Now, I always break down the text into the important parts before I start writing.” (IDI-02)</p> <p>“It changed how I summarized a story by focusing on key elements.” (IDI-03)</p> <p>“Now, I can easily identify the key elements of the story before I start summarizing.” (IDI-05).</p> <p>“I’ve learned that you don’t have to include everything and that it’s better to use your own words.” (IDI-7)</p>
Improved Summarization Through Structured Support	<p>“The structured approach helped me overcome summarizing challenges by breaking down the tasks into manageable.” (IDI-01)</p> <p>“It helped me pick out the most important details and keep my thoughts organized.”(IDI-02)</p> <p>“It made summarizing more mangaeable by taking clear steps.” (IDI - 03)</p> <p>“it greatly boosted my confidence.” (IDI - 05)</p> <p>“it improved my ability to select key details and organize my thoughts more clearly.”(IDI - 6).</p>
Digital Adaptation for Engagement and Convenience	<p>“If we made a app version of the Four Square Graphic Organizer, it would look cooler and make it even easier for us. This would help us make even better summaries.” (IDI- 02).</p> <p>“If we had digital version of the Four Square Graphic Organizer, it would be even more fun and convenient. It would make summarizing even easier and help us create better summaries.”(IDI- 03),</p> <p>“I wish that in utilizing the Four Square Graphic Organizer it could be in typing through our phone. I guess that would aid us in orgsnizing the unfomation more effectively because it is convient for us to use phine.” (IDI-04).</p> <p>“I guess what i can say just my personal opinion is that it would be more fun in the technological set up before nowadays all of us using our phones could cater to all the elements of a story.” (IDI- 07).</p>

Visual Scaffolds for Comprehension, such as graphic organizers, have emerged as essential tools in supporting students' comprehension and summarization of narrative texts. These tools offer a structured format that guides learners in identifying and organizing key story elements, including the setting, characters, plot, and central theme. In this study, the use of visual scaffolds helped students break down complex narratives into manageable parts, thereby enhancing their understanding and ability to summarize effectively

In the study, the results of using summaries to improve reading comprehension have been successful. Students demonstrated a meaningful improvement when writing their summaries as the study conducted by Hooshang & Forouzan (2024). In the beginning, students required a lot of monitoring and feedback. Students used a checklist to make sure they include the elements of the summary. The results indicated that students incorporated the aspects of the summaries. Moreover, the present findings further strengthen the study made by Kurniaman et al. (2020) which highlights the importance of graphic organizers was an effective visual tools that help students identify and structure key story elements such as setting, characters, and plot. These tools scaffold students' understanding and support them in constructing

coherent summaries. The use of graphic organizers significantly improved students' abilities to comprehend abilities to comprehend and summarize stories, as the visual layout helped them process and connect information more clearly.

Affected Engagement Through Visual Tool, such as graphic organizers, has been shown to positively influence student engagement and learning outcomes in reading comprehension tasks, including summarization. In this study, the integration of the Four Square Graphic Organizer provided students with a clear, structured framework for identifying and organizing key elements of a story.

Chen et al. (2020) propose a multimodal summarization approach that fuses textual and visual data to improve the accuracy and relevance of video summaries. Their work underscores how combining visual content with textual insights creates more robust and engaging summaries, which can better capture the essence of a story or video content. Similarly, in the domain of video summarization, Naikwadi (2025) developed a system leveraging Vision and Language Transformer models that automatically generate detailed frame annotations and coherent summaries. This approach not only automates the summarization



process but also improves user engagement by providing clear, concise, and contextually relevant story summaries from visual data, particularly useful in surveillance and multimedia analytics. Strategic Summarization Skills Development is essential for enhancing students' reading comprehension and critical thinking abilities. Effective summarization requires learners to move beyond simple recall of information and instead engage in higher-order processes such as selecting key ideas, organizing content logically, and expressing it concisely in their own words.

According to Graham and Harris (2021), teaching students a clear, step-by-step approach to summarizing significantly improves their ability to comprehend and synthesize narrative texts. The present study's findings align with this view, demonstrating that when students were guided through the process of identifying central themes, key events, and character development, their summarization performance improved markedly. Moreover, the integration of metacognitive strategies played a crucial role in promoting students' ability to self-monitor and regulate their summarization practices. As noted by Zhang and Guo (2022), incorporating metacognitive prompts and scaffolds into summarization instruction helps learners become more aware of their thinking processes, resulting in more coherent and focused summaries. In this study, students who were encouraged to reflect on the quality of their summaries and revise them accordingly showed greater gains in summarization proficiency.

Improved Summarization Through Structured Support highlighted that the intervention significantly improved students' ability to summarize narratives in a structured manner. Summarization, an effective comprehension strategy, involves condensing key story elements into a concise format. This process enhances memory retention and aids in understanding story structures. Supported by Ramirez-Avila & Barreiro (2021), the study showed that students who practiced summarizing narratives experienced a marked enhancement in reading comprehension. This strategy helped learners better comprehend and remember story details, emphasizing its value in literacy education. In addition, The study also revealed that the intervention played a significant role in equipping learners with a more structured and organized approach in summarizing a story. Summarization is an evidence-based comprehension strategy that encourages students to engage with texts by identifying key elements and synthesizing them into a concise format. This process strengthens memory and helps students internalize story structures. This study supported by Ramirez-Avila & Barreiro (2021) showed that students who practiced summarizing narrative texts demonstrated a significant increase in reading comprehension scores. The strategy helped learners better understand and retain story information, highlighting its value in reading instruction.

Digital Adaptation for Engagement and Convenience integration of digital tools into literacy instruction has transformed how students engage with and approach complex reading tasks, including summarization. In today's classrooms, digital platforms and applications provide dynamic and interactive environments

where learners can practice summarizing stories in more engaging and accessible ways. This study observed that when digital versions of graphic organizers and summarization tools were introduced, students demonstrated higher levels of motivation and participation.

This study supported by Chai et al. (2021) supports this observation, highlighting that digital adaptation of traditional literacy strategies fosters greater engagement and convenience for students. Digital tools allow learners to easily manipulate text, use multimedia supports (such as images, videos, and audio), and receive immediate feedback all of which contribute to a richer and more personalized learning experience. In the context of this study, students expressed greater enthusiasm when using digital graphic organizers compared to paper-based versions, citing the flexibility and interactive features as particularly beneficial. Similarly, to Kim and Reeves (2020), digital summarization tools promote self-regulated learning by enabling students to engage in cycles of reflection and improvement. This aligns with the study's findings, where students using digital formats demonstrated improved organization of story elements and deeper comprehension.

CONCLUSION

The study on the Utilization of Four Square Graphic Organizer in summarizing stories among Grade 6 students reveals a strategic and structured approach in enhancing reading comprehension skills. Prior to the intervention, the level of Grade 6 students' summarizing skills was found to be very low. The pre-test results revealed that the majority of students struggled to identify key story elements and organize their thoughts effectively. With an average percentage score of 45.50% and minimal score variation, it was evident that students lacked both comprehension strategies and the ability to synthesize information from texts, underscoring the need for targeted instructional support.

After the intervention using the Four Square Graphic Organizer, a significant improvement in students' summarizing skills was observed. Post-test results showed a notable increase in performance, with an average percentage score of 86.75% categorized as "High." Most students demonstrated the ability to clearly identify and organize the setting, characters, problem, main events, and solution of a story. Many students were able to accurately identify and organize key story elements, including the setting, characters, problem, main events, and solution. This demonstrates the effectiveness of the structured and visual format in supporting comprehension. Overall, the intervention significantly suggests that the structured approach provided by the graphic organizer effectively enhanced their reading comprehension and ability to summarize texts.

The quantitative comparison between pre-test and post-test scores confirms the effectiveness of the intervention. A paired samples t-test revealed a statistically significant improvement in students' summarizing performance. The mean scores increased from



45.50% in the pre-test to 86.75% in the post-test. The large effect size (Cohen's $d = 6.83$) indicates a strong and meaningful impact of the intervention. This substantial gain demonstrates that the Four Square Graphic Organizer is an effective tool for enhancing academic skills. Its structured, visual format helped students improve both their comprehension and ability to organize written summaries.

Qualitative insights from student interviews supported the results of the quantitative data. Students shared that the Four Square Graphic Organizer helped them understand stories more easily and organize their ideas more clearly. Many also reported feeling more confident when completing summarizing tasks. Common themes included increased engagement, better strategic thinking, and improved comprehension. These responses reflect a positive reception of the intervention and its usefulness in classroom learning.

RECOMMENDATION

Based on the findings of the study, the following recommendations are proposed to enhance the use of the Four Square Graphic Organizer in summarizing stories. Teachers should regularly incorporate graphic organizers to improve students' reading comprehension and summarization skills. Parents are encouraged to support reading habits at home and promote responsible gadget use. Students should apply the strategies independently and develop better focus and self-discipline. Lastly, schools may consider developing a digital version of the organizer to increase student engagement and make learning more accessible and enjoyable in today's technology-driven environment. These steps can promote deeper comprehension and active learning.

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