

Integrating Graphic-Enhanced, Interactive Triple R (GEI3R) Strategy to Foster Reading Comprehension in EFL

Hannah Joyce N. Aguete¹, Angeline Norm Y. Abella², Rommel T. Amancio³, Almarie Jaen Constantino⁴, Mariecar A. de la Cruz⁵, Stella D. Lucas⁶, Fheiby A. Ribac⁷, and Madeline T. Fernando⁸

Mariano Marcos State University¹²³⁴⁵⁶
Corresponding email: mtfernando@mmsu.edu.ph

ARTICLE INFO

Article History

Submission : 11-09-2025
Received : 13-11-2025
Revised : 03-12-2025
Accepted : 03-12-2025

Keywords

GEI3R strategy
level of comprehension
reading comprehension
reading strategies

DOI:

<https://doi.org/10.61994/jee.v3i2.1282>

ABSTRACT

This research employed the Graphic-Enhanced Interactive Triple R (GEI3R) Strategy as an intervention to enhance the reading comprehension of Grade IV pupils in their English classes. Total sampling was utilized in the schools where teaching interns conducted their practice teaching, as all the Grade IV pupils were observed to have poor reading comprehension. Specifically, it aimed to determine the level of pupils' reading comprehension through a pretest and posttest and to identify improvements after the implementation of the GEI3R strategy. To achieve these objectives, the study employed a mixed-methods approach, collecting both quantitative and qualitative data using a researcher-developed pretest and posttest questionnaire, an interview guide, and an observation checklist, all of which were validated by experts. Descriptive statistics were applied to analyze the pretest and posttest results, while thematic analysis following the protocol of Braun and Clarke (2021) was used to analyze data from interviews. The study's findings confirmed the effectiveness of the GEI3R strategy, as evidenced by a significant increase in the posttest mean score (9.27) compared to the pretest mean score (2.27), with a significant mean difference of 7.00. Thematic analysis further revealed distinct themes that show how the strategy contributed to improvements in pupils' reading comprehension. This implies that the GEI3R intervention effectively enhanced the reading abilities of Grade IV pupils at Filipinas East, Santo Cristo, and Subec Elementary Schools, where the teaching interns conducted their practice teaching. Thus, the strategy is recommended for use in other schools, as it can be adapted to meet the diverse needs and contexts of learners within the Philippine basic education system.

This is an open access article under the [CC BY-SA](#) license.
Copyright© 2024 by Author. Published by CV. Doki Course and Training



Introduction

Reading is a vital component of learning, both within the school environment and throughout life. It serves as a bridge between newly acquired information and existing knowledge, which facilitates the understanding of concepts and methods (Torres, 2019). As one of the most fundamental skills, reading enables learners to acquire new knowledge, progress through various educational stages, and effectively engage with the world around them. While reading itself is important for personal and academic development, the ability to comprehend what is read is even more important. Reading comprehension is essential for meaningful learning. According to Hijazi (2018), it significantly influences other language skills and plays a key role in the overall effectiveness of the learning process. Strong comprehension not only enhances academic performance but also contributes to the development of a solid knowledge base that enables students to become proficient and independent readers.

Researchers have consistently found that pupils experience significant difficulties in reading comprehension (Agustin & Belarmino, 2024; Fitriani & Zulpa, 2024; Mudia et al., 2023), with findings showing low comprehension levels, limited vocabulary, and difficulty constructing meaning from texts. In the Philippine context, this problem remains a critical national concern. Based on DepEd Memorandum No. 173, s. 2019, *Hamon: Bawat Bata Bumabasa* (3Bs Initiative), national assessment results reveal that a large proportion of early-grade pupils fail to meet the expected standards in language, literacy, and numeracy. Similarly, the 2022 Program for International Student Assessment (PISA) reported a continued decline in reading performance among participating countries, including the Philippines. As documented by SEAMEO INNOTECH, the Philippines ranked fourth from the bottom among 79 high- and middle-income countries in reading, confirming persistent challenges in pupils' reading comprehension and underscoring the need for effective instructional interventions.

Similarly, classroom observations during the teaching demonstrations of the researchers revealed that Grade 4 pupils are struggling to comprehend the content of stories, paragraphs, and other reading materials assigned to them. One teaching intern noted:

"Pupils have difficulty understanding the reading materials given to them. Whenever I give them a text to read, they become noisy, asking about words they do not understand. When I ask questions about the text, they cannot answer because they did not comprehend it. There are some pupils who can respond, but only about 2 to 3 pupils."

These observations were confirmed by the cooperating teachers, who noticed similar problems in their own classrooms. They noted that many pupils exhibited difficulty decoding unfamiliar words, making inferences, and grasping the overall meaning of texts. According to them, even when reading materials were read aloud or simplified, a significant number of pupils still struggled to follow the storyline or retain key information. In addition, interviews with pupils confirmed these observations. A common observation was that when the reading material contained unfamiliar word, many pupils would immediately express confusion. One pupil admitted:

"Diak maaw awatan uray mamin adok basaenen, ma'am." (Ilocano)

"I still don't understand it even if I read it multiple times, ma'am." (English)

Another observation is that pupils tend to be uninterested to read. When given reading text, they did not show interest or motivation at all. This is probably one of the reasons why they face problems with reading comprehension. They lack practice reading as they feel not motivated and encouraged to read. Another pupil confessed:

"Masadutak agbasa aglalo nu atiddug ta basaen diak to meet la maawatan. (Ilocano)

"I get tired of reading, especially when the text is long, because I still don't understand it." (English)

When pupils lack motivation to read, they tend to engage with texts only superficially or avoid reading altogether, which limits the development of their reading comprehension skills. Previous studies emphasize fostering a love for reading to enhance engagement and motivation, both of which are essential for effective comprehension (Artayasa et al., 2023; Pfost & Heyne, 2022). Research has shown that the use of engaging reading materials and interactive activities can increase pupils' interest and improve comprehension. For instance, Larson et al. (2016) found that the implementation of reading strategies among 56 pupils across different grade levels resulted in improved reading comprehension and increased motivation. Similarly, Taboer and Rochyadi (2024) reported that reading intervention

strategies effectively motivate pupils to read, while Valle (2023) recommended targeted interventions for pupils at frustration and instructional reading levels.

However, despite these findings, most previous studies focused broadly on motivation and general reading strategies, with limited emphasis on graphic-enhanced, interactive, and structured approaches specifically designed for elementary pupils with poor reading comprehension in local Philippine classrooms. Moreover, there is a lack of empirical evidence on the effectiveness of the Graphic-Enhanced Interactive Triple R (GEI3R) Strategy, particularly among Grade IV pupils in public elementary schools in Ilocos Norte. This gap emphasizes the need for context-specific interventions that combine visual support, interaction, and repeated reading to address both motivation and comprehension challenges.

Hence, this study utilized the GEI3R Strategy as an intervention to enhance the reading comprehension of Grade IV pupils at Filipinas East Elementary School, Sto. Cristo Elementary School, and Subec Elementary School in Ilocos Norte. Specifically, this study sought to answer the following questions: (1) What is the level of reading comprehension of Grade IV pupils before and after implementing the GEI3R strategy? (2) Is there a significant improvement in their reading comprehension after the implementation of the GEI3R strategy? and (3) What specific improvements in pupils' reading comprehension can be observed after using the GEI3R strategy?

Reading strategies are methods and tools that influence pupils' ability to comprehend and engage with written texts. According to Gilakjani and Sabouri (2016), these strategies help pupils process information more effectively and enhance their overall understanding of the material. By using a variety of reading strategies, pupils not only improve their reading comprehension (Banditvilai, 2020) but also engage more actively with texts (Bjedov & Soldo, 2024). This active engagement leads to deeper comprehension, critical thinking, and a stronger grasp of content across various subjects.

In recent years, teachers have adopted a range of reading strategies to support pupils' comprehension development. Among these, interactive reading strategies have been shown to be particularly effective, as they promote deeper understanding and active engagement with texts (Ashford, 2024). For example, a study by Sanchez et al. (2021) investigated the reading comprehension skills of fourth-grade pupils using a quasi-experimental method. The study involved 30 pupils in a control group and 30 in an experimental group who were taught using interactive reading strategies. Pretest and posttest results revealed that interactive reading strategies enhanced learning, developed cognitive processing skills, and maximized information retention. Similarly, Ahmed et al. (2021) found notable improvements in reading comprehension among 10th-grade students using interactive reading strategies. Their quasi-experimental study used independent samples t-tests and confirmed the strategies' effectiveness in enhancing reading comprehension. These findings show that interactive reading strategies create a dynamic and participatory reading experience.

In addition to interactive approaches, visually appealing reading strategies have also been used to improve reading comprehension. These strategies integrate visual elements such as colors, shapes, diagrams, and spatial elements to make written texts more engaging and easier to understand. Using visual tools like charts, concept maps, and graphic organizers can make pupils identify main ideas, organize supporting details, and recognize relationships

between concepts and ideas. Research supports the effectiveness of visual strategies in improving reading comprehension. For instance, a study by Níkleva & Rodríguez-Muñoz (2022) employed a quasi-experimental longitudinal design to examine the impact of visual elements on reading comprehension among 221 primary and secondary students in six schools in Andalusia and Madrid, Spain. The study found that visual images significantly improved students' reading comprehension. Likewise, studies by Hermansyah (2021) and Siskadamayanti et al. (2020) also demonstrated increased comprehension scores, with post-test results significantly higher than pre-test scores after the use of visual reading strategies.

Considering these proven strategies, the present study introduces the Graphic-Enhanced Interactive Triple R (GEI3R) Strategy as an intervention aimed at developing reading comprehension among pupils. The GEI3R strategy combines graphic-enhanced and interactive approaches through the Triple R framework, *Read, React, and Reflect* to create an engaging and visually enriched reading experience. In this strategy, pupils first *Read* the story and express their initial thoughts in a section called *the character's view*. The *React* phase is captured through a thought bubble labeled *Thoughts in My Mind*, where pupils describe their reactions and observations. Finally, in the *Reflect* stage, represented by a mirror, pupils connect the story to personal experiences and discuss lessons learned. The integration of visual elements not only helps pupils better understand the text but also stimulates motivation and participation. The strategy becomes interactive as pupils are encouraged to share their reactions and reflections with peers, creating opportunities for collaborative learning and deeper insights. Through its combination of visual and interactive components, GEI3R aims to make reading a more meaningful, engaging, and effective process for developing reading comprehension skills among pupils.

The GEI3R strategy was implemented following the implementation process below.

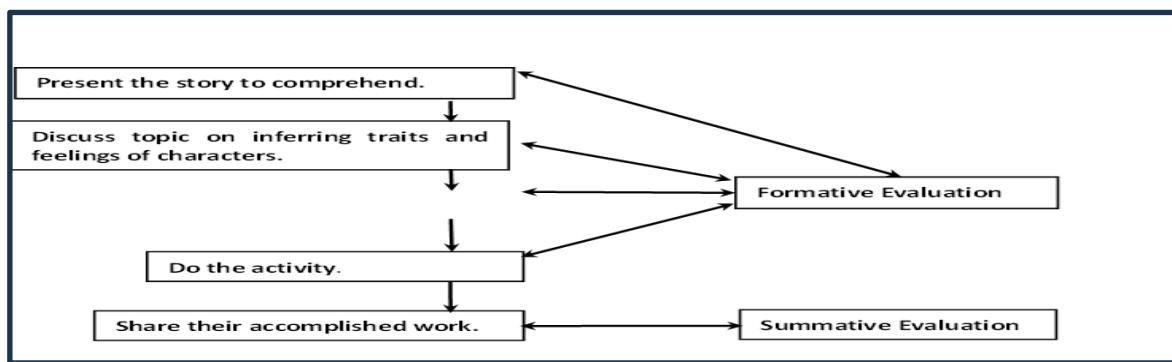


Figure 1 The Implementation Process

The intervention begins with the presentation of the story, followed by the discussion on the topic of *Inferring Traits and Feelings of Characters*. They were also taught how to draw conclusions about the character's feelings and traits from what the character says, does, and thinks. A formative evaluation was used to assess if they understood it. The GEI3R strategy was introduced to them, explaining its different steps and the activities involved. Then, a story was presented, and pupils were asked to do given activities following the phases of the GEI3R strategy, namely, *read, react, and reflect*. Each phase integrates visual tools to support comprehension. In the *Read phase*, pupils focused on understanding the text

and identifying key details, particularly those that describe the characters' traits and feelings. This phase encouraged analytical reading as pupils were guided to extract textual evidence that reveals character behavior and motives. The *React phase* allowed pupils to respond to the text on a personal and interpretive level. They completed an activity titled *Thoughts in My Mind*, which involved filling in a thought bubble graphic to express their reactions, interpretations, and emotional responses to the characters and events in the story. This phase fostered critical thinking and text-to-self connections, which are essential for deep comprehension. In the *Reflect phase*, pupils engaged in a metacognitive exercise using the *Looking at the Mirror* activity. This task used a mirror graphic to symbolize reflection, where pupils answered guide questions that encouraged them to relate the story to their personal experiences. All the activities in the three phases were carried out by groups so the pupils had the opportunity to share their work with others. To determine if there is an improvement in their reading comprehension, a summative evaluation was done.

The integration of visual elements in each phase of the GEI3R strategy enhanced pupil engagement and reading comprehension. Thought bubbles, mirrors, and other graphic organizers served as cognitive scaffolds that helped learners process and organize information and ideas learned from the story. These visuals transformed abstract concepts into concrete representations and this helps pupils to understand better the story. Pupils did not simply read to answer comprehension questions; they were motivated to interact with the text, interpret meaning, and reflect on their own experiences.

The application of the GEI3R strategy also aligns with global literacy benchmarks, such as those assessed in the Programme for International Student Assessment (PISA). By developing pupils' abilities to analyze, infer, and evaluate texts, the strategy supports competencies that are critical for international literacy standards. It enhances the broader reading competencies of Filipino learners.

Method

This study employed a mixed-method research design, integrating both quantitative and qualitative approaches. According to Creswell and Plano Clark (2018), mixed-method research enables researchers to gain a more comprehensive understanding of a phenomenon by combining numerical data with in-depth qualitative insights, thereby strengthening the validity and interpretation of research findings. The quantitative method was used to determine the pupils' level of reading comprehension before and after implementing the intervention, while the qualitative method was used to determine the pupils' improvements in their reading comprehension after utilizing the strategy.

The study was conducted at three elementary schools in Ilocos Norte, namely Filipinas East Elementary School in San Nicolas, Sto. Cristo Elementary School in Bacarra, and Subec Elementary School in Pagudpud where the student researchers had their practice teaching. By conducting the study in multiple schools, it would capture a diverse range of experiences and perspectives, which could enhance the generalization of their findings. This strategy allowed them to gain a comprehensive understanding of the reading comprehension issues prevalent among Grade IV pupils across different educational contexts.

The table below shows the number of Grade IV pupil participants in the three cooperating schools.

Table 1
Number of Research Participants

Cooperating Schools	Total Number of Participants
Filipinas East Elementary School	16
Santo Cristo Elementary School	11
Subec Elementary School	20
Total	47

The three schools were selected based on the student researchers' assignment locations during their practice teaching. Total sampling was employed, involving all Grade IV pupils from the selected schools. The choice to focus on Grade IV students was purposive, as both the researchers and cooperating teachers observed notable difficulties in reading comprehension among these pupils during the initial month of practice teaching.

Data for this research were collected through the results of the pretest and posttest, interviews, and classroom observations. To obtain comprehensive and reliable information, the following research instruments were utilized:

Pretest and Posttest Questionnaire. A multiple-choice questionnaire, developed by the researchers and validated by the research adviser, resource teachers, and the internship program chair, was administered to the pupils. The researcher-made questionnaire consisted of two parts: the first gathered demographic information about the participants, while the second assessed their level of reading comprehension.

Interview Guide. This tool was used to gather qualitative data on pupils' learning experiences with the GEI3R strategy and to identify perceived improvements in their reading comprehension. The guide included 10 structured questions focusing on how pupils responded to and benefited from the strategy.

Observation Checklist. This tool was used before the implementation of the intervention.

In collecting the data for the research, the following procedure had been implemented:

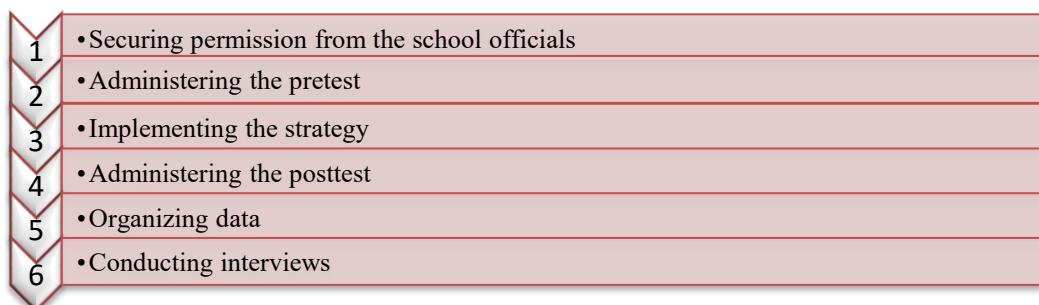


Figure 2 The Research Procedure

In this action research, a four-week study was conducted to investigate the effectiveness of the GEI3R strategy in improving the reading comprehension of Grade IV pupils of Filipinas East, Santo Cristo, and Subec Elementary Schools. The strategy was

integrated into their English classes. Prior to the conduct of the study, permission was obtained from the school administrators. A request letter was given to the principals of the cooperating schools. Upon receiving the approved request, the researchers coordinated with the advisers of the pupil participants regarding the administration of the pretest and posttest, and the implementation of the intervention.

The research began with the administration of a pretest to Grade IV pupils. The pretest involved reading a story and then answering a multiple-choice comprehension test based on the text. This was designed to assess the pupils' initial level of reading comprehension. After the pretest, the GEI3R strategy was introduced and implemented. After utilizing the intervention, a posttest was administered to the same group of pupils. The posttest was intended to measure improvement in reading comprehension after using the strategy. All data from the pretest and posttest were collated, organized, and tabulated for quantitative analysis. Moreover, interviews were conducted to gather qualitative data. The responses were transcribed and analyzed to gain deeper insights into the participants' learning experiences and perceived improvements in their reading comprehension after utilizing the GEI3R strategy.

Descriptive Data Analysis. Descriptive statistics in analyzing the quantitative data gathered was used in the study. The descriptive statistic tools that were used are mean and mean difference. *Mean* was used to analyze the results in the pretest and posttest scores of the pupils. *Mean difference* was used to determine the changes between the mean before and after the implementation of the strategy, and the results were used to determine if there is an improvement in pupils' level of reading comprehension.

The pretest and posttest scores were interpreted following the rating scale below.

Table 2

Rating Scale for the Pretest and Posttest Results

Range of Scores	Comprehension Level
1-2	Frustration
3-4	Transitioning
5-7	Instructional
8-10	Independent

The rating scale was patterned in the Philippine Informal Reading Inventory (Phil-IRI), which is a classroom-based assessment tool developed by DepEd in the Philippines. It was slightly modified to consider the range of scores used in the study and to complement the assessment made, another comprehension level, which is transitioning, was added.

Thematic analysis. The study also used thematic analysis in interpreting the qualitative data that was gathered through interviews on the pupils' improvements after using the GEI3R strategy. As stated by Caulfield (2019), the most common form of conducting thematic analysis is a six-step process namely: *familiarization, coding, generating themes, reviewing themes, defining and naming themes, and writing up*. By adhering to these steps, confirmation bias can be avoided when formulating the analysis of this study.

Results

This chapter presents the results of the data gathered in this study. The researchers structured the presentation and discussion of the results based on the research questions.

Pupils' level of reading comprehension before and after the intervention

Table 3 shows the pretest and posttest scores of Grade IV pupils at Filipinas East Elementary School.

Table 3
Pretest and Posttest Scores of Grade IV Pupils at Filipinas East Elementary School

Range of Scores	Pretest (f)	Posttest (f)	Comprehension Level
1-2	7	0	Frustration
3-4	8	0	Transitioning
5-7	1	3	Instructional
8-10	0	13	Independent
TOTAL	16	16	
MEAN	2.63	8.75	

Legend: Range of Mean Scores Comprehension Level
7.78-10.00 Independent
5.52-7.77 Instructional
3.26-5.51 Transitioning
1.00-3.25 Frustration

The table shows that after the implementation of the GEI3R strategy, there was a marked improvement in the reading comprehension of the Grade IV pupils, as shown by the substantial difference between their pretest and posttest scores. The posttest results reveal that most pupils achieved higher scores that placed them within the independent level of comprehension, and the overall mean score significantly increased.

Table 4
Pretest and Posttest Scores of Grade IV Pupils at Santo Cristo Elementary School

Range of Scores	Pretest (f)	Posttest (f)	Comprehension Level
1-2	7	0	Frustration
3-4	3	0	Transitioning
5-7	1	0	Instructional
8-10	0	11	Independent
TOTAL	11	11	
MEAN	2.00	9.82	

Legend: Range of Mean Scores Comprehension Level
7.78-10.00 Independent
5.52-7.77 Instructional
3.26-5.51 Transitioning
1.00-3.25 Frustration

Table 4 presents the pretest and posttest results of participants from Sto. Cristo Elementary School. The data show that, prior to the intervention, most pupils were at the frustration level of reading comprehension, with a low mean score of 2.00. However, following the implementation of the GEI3R strategy, the mean score significantly increased to 9.82, which reflects an improvement in their reading comprehension skills.

Table 5 presents the pretest and posttest results of participants from Subec Elementary School. The data reveal that, prior to the intervention, a significant number of pupils scored between 1 and 2, placing them at a frustration level.

Table 5
Pretest and Posttest Scores of Grade IV Pupils at Subec Elementary School

Range of Scores	Pretest (f)	PostTest (f)	Comprehension Level
1-2	12	0	Frustration
3-4	8	0	Transitioning
5-7	0	9	Instructional
8-10	0	11	Independent
TOTAL	20	20	
MEAN	2.2	9.25	

Legend: Range of Mean Scores Comprehension Level

7.78-10.00	Independent
5.52-7.77	Instructional
3.26-5.51	Transitioning
1.00-3.25	Frustration

The low pretest mean score of 2.2 indicates a clear difficulty in understanding the story. However, after the implementation of the GEI3R strategy, the majority of the participants scored within the 8–10 range, resulting in an increase in the posttest mean score to 9.25. This shift suggests a marked improvement from a frustrated to an independent level of comprehension. The results imply that exposure to the GEI3R strategy leads to enhancement in pupils' reading comprehension.

Significant difference in pupils' reading comprehension level before and after the intervention

Table 6
Mean Difference of Pretest and Posttest Scores of the Participants by Cooperating Schools.

Cooperating School	Number of Participants	Mean Score		Mean Difference	Comprehension Level
		Pretest	Posttest		
Filipinas East Elementary School	16	2.63	8.75	6.12	Instructional
Sto. Cristo Elementary School	11	2.00	9.82	7.82	Independent
Subec Elementary School	20	2.2	9.25	7.05	Instructional
TOTAL:	47	2.27	9.27	7.00	Instructional

Table 6 presents the overall mean score differences between the pretest and posttest results of Grade IV participants from the three cooperating schools. The findings reveal that pupils from Filipinas East and Subec Elementary Schools achieved mean score improvements of 6.12 and 7.05, respectively, indicating a shift to the instructional level of reading comprehension. Although these pupils remained within the instructional level, the increase in mean scores suggests a positive impact of the GEI3R strategy on their reading comprehension. In contrast, Santo Cristo Elementary School recorded a mean difference of

7.82, placing its pupils at the independent level, a significant improvement from the initial frustration level observed in all three schools prior to the intervention. These results affirm the effectiveness of the GEI3R strategy in enhancing reading comprehension among Grade IV pupils.

The above findings are supported by the following remarks of the pupil participants.

When I did the given matrix, it reminded me how to become happy while answering. The colors and graphics of it also became a factor in why I enjoyed it. If you are happy doing the activity you can concentrate and make a better answer.

Respondent 3

Before, I could not understand the story and I did not know how to infer. But after implementing the strategy, which is GIE3R, it helped me to infer the feelings and traits of the characters in the story by reading.

Respondent 31

It was effective since there was a change in my reading comprehension skills and I can say that it improves my ability to understand a story.

Respondent 36

Significant improvements in the pupils' reading comprehension after using the GEI3R strategy

Pupils noted improvements in their reading comprehension after using the GEI3R strategy. The following themes were drawn from the qualitative data gathered through interviews.

Improved visualization. Most of the pupils confirmed that after using the GEI3R strategy, they were able to improve their visualization.

This claim is supported by the responses of the participants during the interviews.

I was able to understand the story well because of the engaging graphics on it. And it helps me immerse myself in the setting and characters' experiences.

Respondent 39

The graphics are good wherein I was able to enjoy the activity, and it helps me to answer all the given questions. I am also motivated and engaged in the activity.

Respondent 42

I love the graphics and that helps me to comprehend what am I reading. And it makes it easier for me to know and remember the information.

Respondent 43

Developed skills in summarizing, making inferences, and finding the main idea. The pupils admitted that they were able to develop their skills in summarizing, making inferences and finding main idea after using the GEI3R strategy.

The following remarks support the participants' claim that they were able to develop their skills in summarizing, making inferences and finding main idea:

Before, I could not understand the story and I did not know how to infer. But after being immersed in the GEI3R strategy, it helped me to infer the feelings and traits of the characters in the story by reading.

Respondent 31

GEI3R strategy helps me. When it still needs to be implemented in our lesson, it is hard for me to really understand the story. Then, after the implementation, it helped me summarize the story.

Respondent 26

GEI3R is new to us. Answering the question develops our critical thinking of the main idea of the story, especially when I am now in the reflection stage. In the reflection part, I am thinking about the best idea that I can learn from the story, and the GEI3R really helped me.

Respondent 45

Increased vocabulary. The pupils noted that there was an increase in their vocabulary after using the *GEI3R* strategy. Increased vocabulary helps them communicate their views more effectively and gives them the joy of better understanding the ideas of others.

The following remarks support the claim of the participants:

It was helpful because I learned a lot when I did the given matrix. It increased my vocabulary and helped me on how to infer traits and feelings of a character in the story.

Respondent 27

I was able to comprehend the text and answer the matrix easily because some words in the story are familiar. Reading also helped me to increase my vocabulary and comprehend the overall message of the text.

Respondent 31

Developed skills in making connections. Skills in making connections are another skill developed by the pupils after the application of the *GEI3R* strategy. They noted that reading a story can prompt reflection, helping them connect their own experiences and emotions to those of the characters in the story.

This claim is supported by the participants' remarks as follows:

I was able to answer more easily because we had a shared understanding of the story, and we were able to work together

Respondent 5

We were able to work as a team and share our ideas together. Also, collaboration and mutual support made it easy for us to find the correct answer.

Respondent 18

Enhanced enthusiasm to read. The pupils revealed that they developed interest and enthusiasm to read after using the *GEI3R* strategy.

This claim is supported by the statements of the participants as follows:

I really enjoyed the activities. It motivates me to read more stories to improve my reading comprehension skills. I also enjoyed interacting with others.

Respondent 15

I was happy because our group could answer the activity, and we learned a lot about the story.

Respondent 17

Discussion

The findings of this study provide strong evidence for the effectiveness of the Graphic-Enhanced Interactive Triple R (GEI3R) strategy in improving the reading comprehension skills of Grade IV pupils and increasing their engagement in reading activities. The results are consistent with existing research on structured and interactive reading interventions, emphasizing that comprehension difficulties among pupils can be addressed through well-designed instructional strategies that integrate visual, cognitive, and interactive elements. This supports earlier studies asserting that pupils' reading comprehension improves when instructional approaches actively involve learners in meaning-making processes (Bakhtiyorovna, 2024; Sari et al., 2019).

One of the key strengths of the *GEI3R* strategy identified in this study is its strong emphasis on graphic enhancement through the use of pictures, visual organizers, and

supportive visual cues. Pupils reported that these visual elements helped them better understand and retain information from texts. This finding aligns with previous research highlighting the role of graphical tools in facilitating comprehension by helping learners establish clearer connections between ideas presented in the text (Sari et al., 2019). Visual supports reduced cognitive load and made abstract concepts more concrete, which allow pupils to process information more effectively.

The significant improvement observed in pupils' reading comprehension levels after the implementation of the GEI3R strategy demonstrates its instructional effectiveness. Quantitative results showed notable gains in comprehension skills, indicating a strong relationship between the use of the strategy and improved reading performance. These findings resonate with Nailon et al. (2023), who emphasized that the development of higher-order thinking skills is contingent upon learners' mastery of basic comprehension processes. Through structured rereading, interactive discussions, and guided reflection, the GEI3R strategy provided pupils with repeated opportunities to deepen their understanding of texts.

In terms of learner engagement and motivation, the findings revealed that the majority of pupils became more enthusiastic and confident in reading after exposure to the GEI3R strategy. This increased motivation is attributed to the interactive components of the strategy, which encouraged pupils to actively participate in reading, share ideas, and collaborate with peers. This aligns with Ahmed et al. (2021), who noted that interactive reading strategies significantly enhance pupils' motivation, which lead to sustained engagement and improved comprehension outcomes. Similarly, Deluaq and Lim (2022) noted that active learning processes promote interest in reading and critical evaluation of texts.

Qualitative data further supported these findings, as pupils consistently expressed that the GEI3R strategy made reading more enjoyable and meaningful. Many pupils reported improvements in specific comprehension skills, including visualization, summarizing, making inferences, identifying the main idea, vocabulary development, and making connections. Improved visualization, in particular, was frequently mentioned by pupils, as they were able to mentally picture events and characters more clearly when reading. This finding confirms Marshall's (2023) assertion that mental imagery plays a crucial role in reading comprehension, with deeper understanding leading to more vivid and accurate visualization.

Moreover, the development of summarizing, inferencing, and main-idea identification skills indicates that the GEI3R strategy effectively supported pupils' higher-level cognitive processing of texts. These skills enabled pupils to focus on essential information, interpret implicit meanings, and critically evaluate content. As noted by Fitri et al. (2022), identifying the main idea becomes less challenging when learners have a strong foundation in comprehension, a result clearly reflected in this study. Vocabulary gains also contributed to improved fluency and comprehension, reinforcing the findings of Lawrence et al. (2022), who emphasized the close relationship between academic vocabulary and reading comprehension.

Despite the overall positive outcomes, the implementation of the GEI3R strategy emphasized the need for careful planning and consistent application to maximize its

effectiveness. Similar to other instructional interventions, sustained teacher guidance and appropriate material selection are essential to maintain pupil engagement. This observation echoes concerns raised in previous research that instructional strategies require ongoing refinement to address learners' evolving needs and classroom contexts.

The implications of this study extend beyond the participating elementary schools in Ilocos Norte. The positive effects of the GEI3R strategy on pupils' reading comprehension and motivation offer valuable insights for teachers, curriculum developers, and school administrators seeking effective literacy interventions, particularly in settings where reading difficulties remain prevalent. By integrating visual enhancement, interaction, and structured rereading, the GEI3R strategy provides a practical and replicable model for improving reading instruction in elementary classrooms.

Future research may explore the long-term effects of the GEI3R strategy on reading comprehension and its adaptability across different grade levels and learning environments. Further investigation into which specific components of the strategy contribute most significantly to comprehension gains may also inform the development of more targeted reading interventions.

In conclusion, this study provides compelling evidence that the Graphic-Enhanced Interactive Triple R strategy is an effective instructional approach for enhancing reading comprehension, increasing learner engagement, and fostering positive reading attitudes among Grade IV pupils. The demonstrated improvements in comprehension skills and motivation reveal the strategy's potential as a valuable tool for strengthening literacy instruction in elementary education.

Conclusions

The Graphic-Enhanced Interactive Triple R (GEI3R) strategy has proven to be an effective tool in enhancing the reading comprehension skills of elementary pupils. This innovative strategy, which incorporates the phases of Read, React, and Reflect, provides a model that integrates visual elements and interactive tasks. The strategy led to notable improvements in the post-intervention assessment scores of pupils and also promoted pupil engagement, creativity, and deeper comprehension of texts. Through the use of visual and interactive activities, pupils were able to process information, identify story elements, and express personal reflections, and this resulted in meaningful and enriched learning experiences for the pupils.

The implementation of the GEI3R strategy further demonstrated its ability to encourage active participation, collaborative learning, and the development of critical thinking skills. These findings suggest that GEI3R would also support the holistic development of young readers. The structured and visually enriched nature of the strategy fosters an inclusive learning environment, which makes reading activities more interactive and engaging for diverse learners.

With its effectiveness, it is recommended that the GEI3R strategy be adopted in reading instruction within the Philippine basic education system. Teachers are encouraged to incorporate this strategy in classroom reading activities to support learners in identifying important textual details and developing reflective thinking. Moreover, the application of the

strategy may be extended to other subjects such as Science, History, and Filipino, where comprehension of informational and narrative texts is essential.

Declarations

Authors' contribution. Hannah Joyce N. Aguete, Angeline Norm Y. Abella, Rommel T. Amancio, Almarie Jaen Constantino, Mariecar A. de la Cruz, Stella D. Lucas, Fheiby A. Ribac, were responsible for the overall conceptualization and design of the study. They prepared the research instruments and communication letters. They performed the data collection process, and the analysis and interpretation of the data. They conducted the pretest and posttest and interview among the pupils. They also analyzed the quantitative and qualitative data. The adviser, Dr. Madeline T. Fernando helped the researchers in the editing of the communication letters and the manuscripts, guided them in all throughout the research process, from the conceptualization to the finalization of their research manuscripts. She also prepared the article for publication

Funding statement. The research study was not funded by any agency.

Conflict of interest. The authors declare no conflict of interest.

Additional information. No additional information is available for this paper.

References

Agustin, L. J., & Belarmino, M. P. (2024). Factors affecting the reading comprehension of Grade 2 learners: Basis for an intervention program. *International Journal for Multidisciplinary Research*. <https://doi.org/10.36948/ijfmr.2024.v06i01.12619>

Ahmed, I., Thomas, M., & Hamid, S. (2021). Improving reading comprehension skill through interactive reading strategies of Grade 10th students at public secondary school. *Pakistan Journal of Education Research*, 3(2). <https://doi.org/10.52337/PJER.V3I2.39>

Ariana, A., & Ardiana, A. (2021). Making connections: A teaching strategy to foster junior high school students' reading comprehension. *Ethical Lingua: Journal of English Language and Literature*, 8(2). <https://ethicallingua.org/25409190/article/view/327>

Artayasa, I. K., Komang, N., & Yuliati, D. E. (2023). An important elements in promoting reading comprehension. *Yavana Bhāshā: Journal of English Language Education*, 6(2). <https://doi.org/10.25078/yb.v6i2.2193>

Ashford, R. (2024). The role of interactive reading strategies in enhancing reading comprehension of lower primary students. *Research and Advances in Education*, 3(12), 46–53. <https://doi.org/10.56397/rae.2024.12.07>

Bakhtiyorovna, D. B. (2024). Effective strategies for improving reading comprehension. *American Journal of Philological Sciences*, 4(6), 100–104. <https://doi.org/10.37547/ajps/volume04issue06-21>

Banditvilai, C. (2020). The effectiveness of reading strategies on reading comprehension. *International Journal of Social Science and Humanity*, 10(2), 46–50. <https://doi.org/10.18178/IJSSH.2020.V10.1012>

Barber, A. T., & Klauda, S. L. (2020). How reading motivation and engagement enable reading achievement: Policy implications. *Sage Journals*, 7(1), 27–34. <https://doi.org/10.1177/2372732219893385>

Bjedov, V., & Soldo Mutshaus, S. (2024). Teaching and application of reading strategies in Croatian language teaching. *Diacovensia*, 32(2), 291–314. <https://doi.org/10.31823/d.32.2.6>

Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications Ltd.

Caulfield, J. (2019). *How to do thematic analysis | Step-by-step guide & examples*. Scribbr. <https://www.scribbr.com/methodology/thematic-analysis/>

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (3rd ed.)*. SAGE Publications.

Department of Education. (2019). DepEd Memorandum No. 173, s. 2019: *Hamon: Bawat Bata Bumabasa (3Bs Initiative)*. https://www.deped.gov.ph/wp-content/uploads/2019/11/DM_s2019_173-1.pdf

Delua, C. J., & Lim, R. A. (2022). Improving the reading comprehension of Grade 8 learners using 4Rs (Read, Retell, React, Reflect). *International Journal of Humanities, Arts and Social Sciences*, 7(1). <https://airccse.com/ijhas/papers/7222ijhas05.pdf>

Fitri, W., Eliza, E., Irwandi, I., & Safitri, L. (2022). An analysis of students' difficulties in reading comprehension of descriptive text. *Journal of English Language and Education*, 7(2), 52–67. <https://doi.org/10.31004/jele.v7i2.276>

Fitriani, F., & Zulpa, Z. (2024). Analysis of the problems encountered by students in reading comprehension. *Journal of English Education and Linguistics*, 4(2), 43–55. <https://doi.org/10.56489/peel.v4i2.146>

Gilakjani, A. P., & Sabouri, N. B. (2016). A study of factors affecting EFL learners' reading comprehension skill and the strategies for improvement. *International Journal of English Linguistics*, 6(5), 180. <https://doi.org/10.5539/ijel.v6n5p180>

Hermansyah, S. (2021). Visual imagery strategy to enhance students' reading comprehension. *La Ogi: English Language Journal*, 7(2), 31–40. <https://doi.org/10.55678/loj.v6i1.218>

Hijazi, N. D. (2018). The relationship between students' reading comprehension and their achievement in English. *US-China Foreign Language*, 16(3). <https://tinyurl.com/2uhjctn2>

Larson, K., Ledger, K., & Mastel, A. (2016). Increasing motivation to improve reading comprehension. *Master of Arts in Education Research*. <https://tinyurl.com/4bnh2ry7>

Lawrence, J. F., Knoph, R., McIlraith, A., Kulesz, P. A., & Francis, D. J. (2021). Reading comprehension and academic vocabulary: Exploring relations of item features and reading proficiency. *Reading Research Quarterly*, 57(2), 669–690. <https://doi.org/10.1002/rrq.434>

Marshall, A. (2023). *Mental imagery and reading comprehension*. Dyslexia Blog. <https://blog.dyslexia.com/mental-imagery-and-reading-comprehension/>

Mudia, S., Devanti, Y. M., & Nurkamilah, N. (2023). Reading comprehension problem and solution in online classroom. *Journal Pendidikan Bahasa Inggris*, 1(2). <https://doi.org/10.47134/jpbi.v1i2.52>

Nailon, R., Balazuela, K., Catarinen, S., Hemarangan, J., Catat, K. M., Lequin, V. D., Tinapay, A., Tirol, S. L., & Samillano, J. (2023). Enhancing the reading comprehension skills of junior high school students using young adult literature: A review of related studies. <https://tinyurl.com/5au8k4yj>

Níkleva, D. G., & Rodríguez-Muñoz, F. J. (2022). Effects of a visual literacy programme for the improvement of reading comprehension in primary and secondary school students. *Educational Studies in Language and Literature*, 22(1), 1–19. <https://doi.org/10.21248/11esll.2022.22.1.394>

Pfost, M. A., & Heyne, N. (2022). Fostering children's reading comprehension: The importance of fiction reading. *Zeitschrift für Bildungsforschung*, 13, 127–137. <https://doi.org/10.1007/s35834-022-00376-0>

Sanchez, D. T., Duroha, J. H., Manayon, R. M. U., Nocillas, J. B., Mangolari, J. L. R., & Yabo, J. F. (2021). Interactive and conventional teaching approaches to optimizing reading comprehension performance. *Revista Geintec*, 11(3), 1848–1858. <https://revistageintec.net/old/wp-content/uploads/2022/02/2055.pdf>

Sari, N. K., Drajati, N. A., & Rochsantiningsih, D. (n.d.). Promoting students' reading comprehension using graphic organizers: A classroom action research. *International Journal of Language Teaching and Education*, 3(2), 118–129. <https://doi.org/10.22437/ijolte.v3i2.7394>

SEAMEO INNOTECH. (2023). INNOTECH notes progress on the country's PISA 2022 results. <https://www.seameo-innotech.org/innotech-progress-pisa-2022/#>

Siskadamayanti, S., Syamsu, T., & Agussalim, H. (2020). The Visual imagery strategy in enhanced students' reading comprehension. *English Language Journal*, 6(1), 1–4. <https://jurnal.umsrappang.ac.id/laogi/article/view/218>

Taboer, M. A., & Rochyadi, E. (2024). Peer-mediated initial reading intervention strategies for students with initial reading difficulties. *Mimbar PGSD Undiksha*, 12(1), 152–162. <https://doi.org/10.23887/jpgsd.v12i1.60852>

Torres, R. (2021). Factors affecting the reading comprehension of intermediate -level learners: Basis for an intervention program. *International Journal of Academic Management Science Research (IJAMSR)*, 5(5), 15–22. <http://ijeais.org/wp-content/uploads/2021/5/IJAMSR210505.pdf>

Valle, A. M. (2023). Pupils' reading motivation, strategies, and performance: Basis for reading intervention program. *International Journal of Research Publications*, 126(1), 332–346. <https://doi.org/10.47119/ijrp1001261620224975>