

IMPROVING THE READING COMPREHENSION OF GRADE 8 LEARNERS USING 4RS (READ, RETELL, REACT, REFLECT) STRATEGY

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ABSTRACT

This study attempts to improve the reading comprehension of Grade 8 learners using the 4R strategy. Thirty-four (34) Grade 8 learners under frustration level participated in the study. 4Rs (Read, Retell, React, Reflect) was employed, and a reading comprehension test was used to collect the required data. This study is action research designed to determine if there is an improvement in students' reading comprehension after implementing the 4R strategy. The implementation of 4R in this study frames Richard Sagor's Four-Stage Model of action research. The researchers have developed a strategy to address students' reading comprehension through reading, retelling, reacting, and reflecting, hence, 4Rs. This strategy combines reading approaches to cater to the essential factors necessary for compelling reading. Mean and Standard Deviation were used to determine the students' comprehension level during pre-test and post-test and determine how dispersed the scores were. Paired Sample T-test was also employed to determine the significant difference between the pre-test and post-test scores. The findings revealed significant differences between students' pre-test and post-test reading comprehension levels using the 4Rs strategy. The study concludes that adopting the 4Rs strategy improves the Grade 8 learners reading comprehension.

KEYWORDS

Reading comprehension, 4Rs (Read, Retell, React, Reflect Strategy), Grade 8

1. INTRODUCTION

Reading is defined to be the process of decoding written symbols. Out of all the macro skills, reading takes a foundational role since it precedes the mastery of all the other skills. In teaching and learning, however, reading is more than just making sense from letters and symbols. It is a complex process that involves not only word recognition but encompasses the ability to process text and understand meaning.

As one of the basic skills required in the classroom, reading takes a significant role in a child's learning process as it is the most prominent language skill (Sadiku, 2015). As claimed by Helarde (2021), it is the mother of all study skills. However, despite a long-standing awareness of reading comprehension as an integral component of the learning process, it remains a critical concern for the schools in Philippine education.

Reading provides readers with a new set of learnings and a vast array of knowledge that will benefit their academic journey. Reading is a prerequisite in all learning areas (Tomas et al. 2021).

It acts as a bridge for students in learning different fields of study because if a learner struggles in reading, he may struggle with learning other subject areas. Every learning institution must put great emphasis on the reading literacy of every learner as it contributes to significant impacts on their general education. Furthermore, how much a person may achieve in his or her personal and professional life is significantly related to his or her reading proficiency (Block & Israel, 2005, as cited by McKown & Barnett, 2007). Thus, every learner must have a solid foundation in reading literacy as it is one of the most vital skills a person must acquire. In the 2018 global survey called Program for International Assessment (PISA) reported by The Manila Times, among the 600, 000 students worldwide, Filipino students got an average reading score of 340 points which deficits to 147 points than the average of 487 falling into the last rank among 79 countries. With these figures, it could be inferred that the reading comprehension of Filipino learners is indeed very alarming. The current status of reading comprehension of Filipino students demands proactive efforts and measures that would elevate the present reading literacy rate of Filipino learners.

However, reading literacy is not merely being able to identify and articulate the words. According to Helardez (2021), reading is a complex process; it is not solely a process of recognizing written or printed texts but refers to putting meaning to what one read and drawing a unified thought of what is read. Therefore, reading comprehension is the accurate measure of reading literacy. Comprehension is considered the essence of reading as it accounts for the process that supports the effective extraction of meaning from a written passage (Alghonaim 2020). A good reader must demonstrate that something gained from the reading activity is the most important by-product of a reading process. Kasmawati et al. (2020) also support that comprehension is the aim of reading. Reading comprehension is the primary goal for readers among proficient readers and is the most common assumption for reading comprehension (William, 2019, as cited in Kasmawati et al., 2019). Therefore, a reader needs to grasp the context of the reading material as it is the central pillar of the reading activity. Furthermore, what is reading when comprehension does not take place?

Teachers play an essential role in facilitating learners to improve their reading skills. In fact, the challenge of teaching reading comprehension remains a significant issue for teachers as most reading facilitators commonly utilize conventional teaching methods. The instructional strategies a teacher employed sometimes caused problems in the students' performance. Strategy training leads to enhanced reading performance (Singhal 2001). Thus, it is very important for teachers to be equipped with sufficient teaching techniques to address the learners reading learning demands. Teachers indeed, hold a critical role in learners' reading competence. Low reading performance can sometimes result from ineffective teaching by an ineffective teacher (Casing, 2019). Alyousef (2006) also stressed that it is the responsibility of the teacher to stimulate students to read by selecting appropriate materials, especially for those in the early stages of learning. Despite the fact that many scholars have been unable to give a unified definition of reading strategies owing to the many settings of language learning, the concept that reading strategies refer to conscious reading activity is widely acknowledged. Carrel (1998) pointed out skimming, scanning, guessing, predicting, forming inferences, confirming or disconfirming assumptions, recognizing key concepts, identifying the main idea, rereading, and other methods as reading strategies. Further exploration is needed on which reading strategies contribute more effectively to reading comprehension. Alyousef (2006) assessed that most researchers focus on a single cognitive approach rather than performing a long-term investigation of multiple strategies. Most of the previous studies focus solely on a single-strategic intervention. Teachers must incorporate multiple active learning strategies to improve every learner's understanding and provide various tasks for better understanding. Teaching children to read with combined reading comprehension strategies has been shown to significantly improve children's reading proficiency (Cooter, 2019). Such strategies include guessing from context, defining expectations, making assumptions about the text, skimming ahead to fill in the context, etc. Creating and utilizing multiple reading

strategies must be put into consideration. It is necessary to explore various reading techniques and not merely spoon-feed the information directly to the students; instead, generate ideas to reinforce and manage the reading material and facilitate comprehension effectively.

With the aforesaid pressing matter, students' problems with reading comprehension can be solved by employing a variety of reading strategies. It can be solved through the learning process undertaken by the teacher (Amira, 2018). One reading comprehension strategy that utilizes various activities and could solve the problem is the 4R strategy (Read, Retell, React, Reflect). The 4R method consists of four steps that allow the child to absorb information using several faculties and become an active participant in the learning process. It begins with reading the text, then retelling the story, then making reactions and giving reflections. With the use of the 4R technique, students become more active participants in the reading process. In the first phase of the technique, the reader goes through text recognition which is required for the subsequent tasks that will aid one in better text understanding. Retelling comes as the second task. This step is anchored with Dialogic Reading which is one of the bases of the intervention made for this action research. Significantly, dialogic reading is the technique of reading illustrated books and utilizing dialogue to engage students in the text. The child learns to be a storyteller through dialogic reading (Whitehurst et al., 1994). The text talk approach is a read-aloud strategy that aims to help students expand their vocabulary (Beck & McKeown, 2001) and development of oral language (Lonigan et al., 1999). In this phase, the reader will be able to point out the main and supporting ideas of the narrative leading to his understanding of the written text. Reacting comes to the third step of the technique. The reader will provide his general reaction based on his initial understanding of the given material. In this phase, the reader will come to absorb what has transpired in the story. Reflecting as the final task generates reflections on the reading material in the context of life experience is similar to relating. It is the kind of contextual learning that typically occurs with very young children (Sumarmi, 2012). During this stage, the teacher engages the students in a discussion of their knowledge or experiences that are relevant in some way to the content being read. The teacher makes an effort to facilitate students in drawing connections between the text's content and their prior experience and knowledge. The teacher attempts to lead and guide the students systematically through the cognitive processes associated with interpreting a reading material in all four phases.

1.1. Problem Statement

The issue of reading comprehension in schools is common and is undeniably a pressing matter that needs to be attended to. It has been a critical concern for schools because reading comprehension appears to be a unique problem that it remains unresolved despite the efforts of scholars to improve the reading status of students. Hence, to help address the problem in reading comprehension of students, the researchers of this study have decided to innovate and implement 4Rs Strategy. The purpose of implementing such strategy is to improve the reading comprehension of students who are under frustration level.

1.2. Research Questions

The following questions are derived from the study problem:

- i. What is the pre-test reading comprehension level of students using 4R strategy?
- ii. What is the post-test reading comprehension level of students using 4R strategy?
- iii. Is there a significant difference between pre-test and post-test comprehension levels of students using 4R?

1.3. Objectives of the Study

This action research project aimed the following objectives:

- i. Improve the reading comprehension of the Grade 8 students under frustration level.

2. LITERATURE REVIEW

2.1. Reading Comprehension

Reading is a necessary element to give students the opportunity to learn, develop personally, and gain access to academic content (Sanchez, 2010). According to Wixson, Peters, Weber, and Roeber (1987), reading is the process of creating meaning that involves: (1) the reader's existing knowledge; (2) the text information; and (3) the reading context. Readers interact with texts as they try to extract meaning. Grabe (1991) claimed reading is an interactive and two-way process between readers and texts that results in making meaning. Pourhosein Gilakjani (2016) stated that the main goal of reading is to gain the correct message from a text that the writer intended for the reader to receive.

Although reading has been defined this way, this does not certainly qualify that every reading process would result in a thorough understanding and comprehension of the texts. The transfer of the information provided in the text to the comprehensible mental representation of the individual depends on many components such as the reader, text, reading act, context, etc (Bayat, 2020). Several authors have agreed that reading comprehension is a complex process during which readers use a number of mental processes, such as reading words, creating meanings, organizing the text, and applying strategies (Habók & Magyar, 2018; Käsper, Uibu, & Mikk, 2018; Rastegar, Kermani, & Khabir, 2017).

Considering the importance of reading and comprehension, educators have been called to ascertain that support must be given to children to develop functional literacy (Snow et al, 1998). It has been claimed that ordinary teaching is insufficient when the case of failing readers is accounted (Brooks et al, 1999). Moreover, the same authors maintained that the need for a reading specialist comes to rise. Wutthisingchai and Stopps (2018) argued that the nature of the texts being read, environment, motivation, learning preferences, and teaching strategies are factors that affect students' motivation. It also showed that the nature of the text being read was the most important factor. This implies that at-risk students can be helped through an intervention program that is structured and focused (Lingard, 2005; Singleton, 2009).

Many countries have given much attention and great importance to reading (Ma'youf & Aburezeq, 2022). In the Philippines, the Department of Education has been intensifying its thrust to bridge literacy gaps among learners, and intensifying the advocacy for reading proficiency by reinforcing the "Bawat Bata Bumabasa" (3Bs) Initiative among the schools in the country as stipulated in Department of Education Memorandum No. 173, s. 2019. Regrettably, digits are showing their refutable truth about the landscape of literacy that the country is currently in. Data shows that by the time children graduate from elementary and are promoted to high school, one-third are identified as 'frustrated readers' and another one-third are 'instructional readers' (Luz, 2007). These levels are both below the desired and expected reading level for the grade and age of the learners.

Carrell and Grabe (2002) explicate reading as a process where, "... a reader engages in processing at the phonological, morphological, syntactic, semantic, and discourse levels, as well

as engages in goal setting, text-summary building, interpretive elaborating from knowledge resources, monitoring and assessment of goal achievement, making various adjustments to enhance comprehension, and making repairs to comprehension processing as needed.” While the reading process seems automatic in nature defined as a reading skill and goes beyond one's conscious control, readers still exert a significant level of active control over their reading process through the use of strategies, which are conscious procedures that are deliberate and purposeful (Urquhart & Weir, 1998; Williams & Moran, 1989).

Aside from enabling students to learn the culture, acquire knowledge, and gain experience, reading is a tool for achieving excellence academically and developing emotional maturity among learners. Its main purpose is comprehension. Reading comprehension is the ultimate goal of reading and this is what the educational process and educators want to seek (Jad, 2003; Ayoub, 2017; Ma'youf & Aburezeq, 2022). This is the reason why teachers continue to innovate and implement different reading strategies.

2.2. Reading Strategies

Theorists and researchers have been emphasizing the importance of using different reading strategies in improving readers' reading comprehension. Reading strategies range from traditional teaching such as scanning and skimming to a variety of strategies that enable readers to build and activate their background knowledge (Azizi & Hamedani, 2016; Tadayonifar et al., 2021).

Ma'youf and Aburezeq (2022) tested the effectiveness of the differentiated strategy in reading comprehension. Two groups were formed where one group was taught using the traditional method while the other group was taught using the four-level strategy (literal, inferential, critical, and creative). The researchers found out that using the four-level strategy helps students perform better when compared to students who were taught the traditional way. Another intervention proposed by McNamara et al. (2007) was the use of four-pronged. This strategy utilizes a comprehension strategy framework where readers monitor their reading by following four subcategories: (a) pre-reading preparation; (b) interpretation of ideas, sentences, and words within the text; (c) organizing, synthesizing, and restructuring information and (d) going beyond text. One major finding is that readers when learners apply a reading strategy that is meta cognitive in nature, it encourages them to monitor their reading.

Similarly, a study conducted by Sporer et al. (2009) determines the impact of reciprocal reading, instructor-guided, and traditional instruction strategies on the reading comprehension of readers. The researchers claimed reciprocal reading strategy is the best among the reading strategies implemented. Reciprocal reading strategy is a procedure where students act as the facilitator in group reading by summarizing, generating questions, clarifying, and predicting.

According to Rupley et al. (2009), struggling readers are more likely to acquire fundamental reading skills and strategies if the teacher's repertoire of teaching approaches includes the direct or explicit model of instruction. Teachers have a significant impact on the amount of knowledge learners acquire. Research on effective teaching has demonstrated clearly that teachers teach students what they need to know directly and explicitly (Rosenshine, 1995, Taylor, Peterson, Pearson, & Rodriguez, 2002). The National Institute of Child Health and Human Development claimed that explicit/direct instruction has been found to be effective in teaching and learning the major components of the reading process—phonics, phonemic awareness, fluency, vocabulary, and comprehension (Rupley et al., 2009).

Goal setting as a reading strategy to improve reading comprehension was the focus of the study by Shih and Reynolds (2018), as they integrated goal setting into reading instruction. They argued that when compared with the traditional teaching, goal setting integrated reading strategy resulted in better reading comprehension of students. Moreover, it was found that the strategy encourages readers' motivation, autonomy, and self-efficacy.

Implementing explicit instructions on different reading strategies greatly improves students' reading comprehension. Each strategy has its own benefits and specific application, therefore educators must apply appropriate reading strategies that are tailored to the readers' "perceived learning styles." In this way, readers can enhance their reading comprehension and experience enjoyment when reading (Tadayonifar et al., 2021).

Similar study conducted by Lijano (2017) where the researcher examined the teaching strategies suited to the 21st century learners. Lijano (2017) argued that it is essential for schools to not only give quality instruction to students, but also to reinforce the components of their engagement in learning, since they are the ultimate result of the entire educational learning process. This is especially significant since it suggests that classroom strategies may be applied to increase student motivation to learn.

Moreover, Niatu and Puji (2018) stressed that teachers should be able to determine what type of learning media to use based on the cognitive level of their students. They also added that when students get engaged in reading, they will become more involved in their learning. In response to this, the researchers innovated a strategy that caters not only to students' phonological, morphological, syntactic, semantic, and discourse levels but also embraces a premium on how students engage in the interpretation and analysis of texts to enhance students' comprehension, namely: Read-Retell-React-Reflect or 4Rs.

2.3. Retelling

The intervention to be used in this research is to be associated with special methods that have been developed to read books aloud. Dialogic reading is one of the bases of the intervention made for this action research. Significantly, dialogic reading is the technique of reading illustrated books and utilizing dialogue to engage students in the text. However, this reading greatly differs from ordinary readings. In traditional reading, an adult reads and a child listens, but in dialogic reading, the child learns to be a storyteller. The text talk strategy is a read-aloud strategy aiming to foster vocabulary growth and development of oral language. However, the findings from studies on dialogic reading provide useful information to practitioners about the pros and advantages of combining Dialogic Reading with a supplemental curriculum (Whitehurst et al., 1994; Lonigan et al., 1999; Beck & McKeown, 2001; Institute of Education Sciences, 2007).

Previous research on reading aloud strategies revealed that when students are taught to make connections, make predictions, and think about the text while reading through consistent reading interventions, students comprehended what they read better and higher-level students were more motivated to read, students' reading comprehension levels, reading fluency, and motivation to read and vocabulary improved (Spencer, 2011; Mitchell, 2015; Hazzard, 2016).

Similarly, Rudiawan and Jupri (2020) utilize retelling-based instruction in enhancing readers' reading comprehension. They claimed that there is a significant difference in the reading comprehension level of students who were taught using the retelling strategy and students who did not use it. It was revealed that utilizing the retelling strategy improves student comprehension and students were happy and enjoyed reading using the strategy.

2.4. Reacting

Even though researchers discuss fluency and comprehension differently, mostly affirm that the connection between fluency and students' understanding of the text is significant. Needless to say, those who read and can make a good expressions also tend to have better reading comprehension abilities (Klauda, 2008).

As proficient readers attend to meaning during reading, their oral reading expression demonstrates their understanding through how they react after reading the text. But expressive oral reading influences struggling readers in a different way. Strugglers are typically more focused on word identification. As they work to identify words, the flow of the text is interrupted and their lack of expressive reading demonstrates their poor understanding (Schwanenflugel & Kuhn, 2016). According to Schwanenflugel and Kuhn: "...the relationship between fluency and comprehension is bidirectional: both reciprocal and interactive."

When students recognize the phrasal and syntactical structures the author is using, they are also able to comprehend the text proficiently as the author intended (Frazier et al, 2006). Though this alone does not guarantee comprehension, it appears that when students facilitate and articulate after reading impacts comprehension. Hence, there is a need for teachers to craft reading instruction and/or intervention that develops students' expression after reading and support reading comprehension abilities as well.

2.5. Reflecting

"Reading is a constructive process in which the text, the reader, and the context interact." In this process, the reader can restructure the information in the text based on his/her ability to decode and working memory based on his/her schemata. While readers interact with the text, they can support and assess their own understanding. Now, when readers are conscious and aware of their understanding of the text, metacognition takes place. Metacognitive strategies are known to be essential in improving reading (Zhang & Zhang, 2013).

In reading, metacognitive strategies are defined as self-monitoring and self-regulating activities which focus on both the process and the product of reading (Zhang & Seepho, 2013). Ahmadi et al., (2013) conducted research on metacognitive reading strategy, the results revealed that metacognitive strategies can facilitate reading comprehension and promote both the performance and understanding of one's reading comprehension.

In relation to reading comprehension, Forrest-Pressley and Waller (2013) discussed metacognitive aspects of comprehension which involve knowing when one has understood a text he/she has read, knowing what one does not understand, and being able to use this knowledge to monitor comprehension. Metacognitive strategies in reading are those strategies designed to increase readers' knowledge of awareness and control of their reading process, improve their reading comprehension, and evaluate whether they have succeeded in their attempt to comprehend. Furthermore, the ability to monitor comprehension depends on what a reader knows about his/her own comprehension processes, thus it can be said that metacognition is the trigger for other processes that are necessary for understanding (Maki & McGuire, 2002; Zhang & Seepho, 2013; Forrest-Pressley & Waller, 2013). Having this ability, students can reflect on the text they are reading by citing their inferences about the text, identifying what they need to learn from the text and what is not necessary, and evaluating the text and their own comprehension.

3. RESEARCH METHODOLOGY

3.1. Research Design

This study utilized an action research design. According to Clark et al 2020, action research is a method of conducting educational research. Educators and professionals commonly use this approach to examine and improve the pedagogy and practice of an educational practitioner. In this sense, action research represents an extension of the reflection and critical self-reflection that a teacher employs on a daily basis. Action research integrates theory and practices through transformation and reflection in a problematic situation within a mutually acceptable ethical framework. Action research is an iterative process in which researchers collaborate on a set of tasks, such as problem assessment, active intervention, and reflective learning (Davin et al., 1999). Action research design is used in this research to determine if there is an improvement in students' reading comprehension after implementing 4R Strategy.

3.2. Action Research Model

This study aims to apply 4R Strategy in improving Grade 8 struggling readers reading comprehension. The implementation of 4R in this study frames Richard Sagor's Four-Stage Model of action research. Sagor's model provides a clear path for using action inquiry. Listed below is the four-stage process to be implemented as 4R Strategy.

3.2.1. Stage 1: Clarifying vision

Gap. The researchers established the gap in the study by identifying the lack in the field of reading, specifically, in improving the reading comprehension of Grade 8 learners under Frustration level using 4Rs strategy.

Research Participants. The respondents of this study are the Grade 8 students under frustration level from Pedro Mariscal National High School, New Sibonga National High School, and Barayong National High School. Using G*Power software (2-tailed, $\alpha = 0.05$, $\beta = 0.80$), 34 students were purposively selected as participants in this study. Twelve students came from Pedro Marsical National High School, 11 students from New Sibonga National High School, and 11 students from Barayong National High School.

Limitation and Delimitation. This study comprised students from the far-flung area who were 13 – 14 years old. The intervention used in this study aims to address only fluency and reading comprehension considering the grade level of the participants. Moreover, the researchers considered Grade 8 students only since they are the group who are susceptible to having difficulties in transitioning from elementary level to secondary level; Grade 7 students were not included in this study since no data on their reading comprehension level are available yet.

Achievement Target. The achievement target of the research is to upskill students in reading. At the completion of the research, students under Frustration level should improve their reading comprehension; and should be able to read texts comprehensively by employing the 4Rs strategy.

Research Instrument. The researchers used the Philippine Informal Reading Inventory (Phil-IRI) Tool to assess students' reading comprehension levels before and after the implementation of 4R Strategy. The test was comprised of three (3) literal-level questions, two (2) interpretive questions, and two (2) applied questions for a total of seven (7) questions. The obtained score percentage were interpreted as follows (as adapted from Johnson, Kress, and Pikulski, 1987):

Student's Score Percentage	Comprehension Level	Meaning
100% - 80%	Independent	The level at which readers function on their own with almost perfect oral reading and excellent comprehension (Flippo, 2014).
79% - 59%	Instructional	The level at which readers profit the most from teacher-directed instruction in reading (Flippo, 2014).
58% and below	Frustration	The level at which readers find reading materials so difficult that they cannot successfully respond to them (Flippo, 2014).

3.2.2. Stage 2: Articulating Theories

The researchers have developed a strategy that would address students' reading comprehension through reading, retelling, reacting, and reflecting, hence, 4Rs. This strategy is a combination of reading approaches to cater to the important factors necessary for effective reading.

3.2.3. Stage 3: Implementing Action and Collecting Data

Research Questions. The following research questions were formulated to address the achievement target specified for this research:

- a. What is the pretest reading comprehension level of students?
- b. What is the post-test reading comprehension level of students using 4Rs strategy?
- c. Is there a significant difference between the pretest and post-test reading comprehension levels of students using 4Rs strategy?

Data Collection. To collect the needed data for this research, the following steps had been implemented by the researchers:

- a. Prior to the conduct of the study, the researchers sent a request to the principal of the respective schools where the participants are from.
- b. The researchers conducted a pretest using the Phil-IRI tool to assess the entry reading comprehension level of the participants.
- c. After the pretest, the 4Rs strategy was introduced and was then followed by a two-week intervention implementation.
- d. Concluding the research process, the researchers conducted a posttest still using the same tool to assess whether the reading comprehension level of the participants have improved after using the strategy.
- e. The data gathered from the pretest and posttest have been collated and tabulated.

Action Plan. To collect valid, reliable, and accurate data, this action plan was carefully constructed and adhered to:

Day 1	<p>Pre-test A 7-item test text material from Phil-IRI was used to determine the entry comprehension level of the students.</p> <hr/> <p>Introducing the 4Rs strategy The researchers introduced 4Rs to the students and discussed how they will apply them while reading a text.</p> <p>Read, Retell, React, Reflect Strategy Read: Have the students read a specific text, it may be in any literary form. Retell: After reading, encourage the students to retell the story in their own words. React: Let the students express their feelings or react to the story they have just read. Reflect: Ask the students about the underlying values presented in the story for them to reflect on the message of the story.</p>
Day 2	<p>Dissemination of practice text materials The researchers gave practice texts to the students so that they can exercise reading by applying the 4Rs Strategy.</p>
Day 3 – Day 14	<p>Implementation of the intervention and regular follow-ups and checking of progress</p>
Day 15	<p>Post-test A 7-item parallel test from the Phil-IRI was used to determine the comprehension of the students applying the 4Rs Strategy.</p>

3.2.4. Stage 4: Reflecting and Planning Informed Action

Collation, and tabulation of data. The scores from the pre-test and post-test were tabulated and analyzed. The following statistical tools were used in the analysis of data:

- a. **Mean and Standard Deviation.** These tools were used to determine the comprehension level of the students during pretest and posttest, and to determine how dispersed the scores were.
- b. **Paired Sample t-test.** This tool was used to determine the significance of the difference between the pretest and posttest scores.

Revising Theory of Action. The results of the statistical analysis were interpreted and served as the basis for whether the strategy helped the students in improving their comprehension levels.

Future action and future areas of research. On the whole, the researchers have determined that 4Rs strategy is useful and helpful in improving students' reading comprehension. Further, the researchers recommend this strategy not only as an intervention for students under frustration level, but as a meta cognitive strategy for students at the instructional and independent levels as well. This strategy was employed by the researchers in their respective schools as a strategy to promote and improve reading comprehension. 4Rs may also be adapted by their respective Schools Division.

4. RESULTS

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.

Shown in Table 1 is the level of students' comprehension before and after the 4R strategy was implemented. The mean score of the pre-test is equal to 2.38 with a standard deviation of 0.164. This

Table 1. Reading Comprehension Level of Students during Pre-test and Post-test

Student	Pre-test Score	Post-test score		
1	1	5		
2	3	5		
3	3	5		
4	3	6		
5	4	6		
6	2	4		
7	1	4		
8	2	6		
9	2	5		
10	3	4		
11	1	4		
12	3	5		
13	3	5		
14	1	4		
15	4	6		
16	4	6		
17	1	3		
18	2	4		
19	3	5		
20	4	6		
21	2	5		
22	3	5		
23	3	4		
24	2	5		
25	2	3		
26	3	6		
27	2	5		
28	3	5		
29	2	4		
30	2	5		
31	1	3		
32	2	4		
33	3	5		
34	1	4		
Mean = 2.38		SD = .164	Mean = 4.74	SD = .154

Means that before the intervention was employed on the students, they were on the *frustration level*. Therefore, their reading comprehension is low. On the other hand, the average of the post-

test of the students is equal to 4.74 with a standard deviation of 0.154. This means that after the implementation of 4R Strategy, the students were still in *frustration level*. However, relative to their performance during the pre-test, there was an increase in their level of comprehension.

Although the comprehension level of the students remained at *frustration*, the results implied that there is an improvement in the mean performance of the students after the implementation of the Read-Retell-React-Reflect Strategy (4Rs). Moreover, the analysis further revealed that all 34 students got higher scores in their post-test compared to their pre-test as shown in the sign test analysis.

Table 2. Sign Test Analysis of the Pre-test and Post-test Scores

		N
Posttest - Pretest	Negative Ranks	0
	Positive Ranks	34
	Ties	0
	Total	34

As seen in Table 2, the Positive Ranks has a value of 34 which means that the difference between the post-test score and pre-test score of each student resulted in a positive number. This implied that all students found the 4R strategy effective in improving their reading comprehension.

A test for the analysis of the significance of the difference in the performance of the students between pre-test and post-test was further conducted. Prior to this, a test of normality of the scores was conducted. Table 3 showed both the Kolmogorov-Smirnov Test and Shapiro-Wilk Test is testing the normality of the scores of the students. The p-values for both tests were $\alpha < 0.05$ which indicates that there is enough evidence to reject the null hypothesis. Therefore, the pre-test scores and post-test scores were not normally distributed.

Table 3. Test of Normality of the Pre-test and Post-test Scores

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.212	34	.000	.880	34	.001
Posttest	.234	34	.000	.876	34	.001

Since the data were not normally distributed, a Wilcoxon signed-rank test was used to test the significance of the difference in the performance of the students between pre-test and post-test. Table 4 showed the p-value was less than $\alpha = 0.05$ which means that there is enough evidence to reject the null hypothesis of no difference. Therefore, the post-test scores ($M = 4.74, SD = .154$) of the students were significantly higher than the pre-test scores ($M = 2.38, SD = .164$) of the students. This implied that the performance of the students after the 4R intervention was given was better relative to their performance before the intervention.

Table 4. Significance of the Difference in the Reading Comprehension of Students between Pre-test and Post-test

TEST	Post-test
Pre-test	2.36** (0.000)

** difference is significant at $\alpha = 0.05$
() p-value

The results above implied that the identified difference in the performance of the respondents is significant, therefore the students' reading comprehension improved after the implementation of 4Rs Strategy. Hence, the Read, Retell, React, Reflect Strategy is an effective intervention in improving students' reading comprehension levels. Although the students remained at *frustration level* after the intervention, it was clear that 4R Strategy helped them improve their reading comprehension.

These findings showed a notable claim that 4R strategy is indeed an effective intervention in enhancing students reading comprehension. The intervention was employed for only 2 weeks which explains why the students remained at *frustration level*, therefore if conducted regularly, 4R Strategy will also be an effective strategy in promoting students from *frustration level* to *instructional level* and *independent level*.

5. DISCUSSIONS AND IMPLICATIONS

The Read-Retell-React-Reflect Strategy was made and intended to address difficulties among learners under frustration level, the increase from pre-test to post-test as shown in the tables above affirmed that the strategy has been effective in improving reading comprehension. The participants were under frustration level during the pre-test with a mean score of 2.38, and this has increased to 4.74 in the post-test.

Furthermore, the results presented a significant improvement in students' reading comprehension considering the time frame that the strategy was introduced to the participants. The participants had been given two weeks to employ and practice the strategy, while the researchers closely monitor their progress day by day.

Given the time factor, the increase in students' scores from pre-test to post-test is a remarkable feat. Clearly, this shows that if more time were given to students when employing this strategy, it may result to a bigger change in reading performance and may upskill frustration level students to instructional level or higher. Thus, it can be inferred that improvement in reading comprehension may depend on the duration of the intervention given. Similarly, the Institute of Education Sciences (2009) suggested that teachers must deliver rigorous, systematic instruction in small groups three to five times a week, throughout the quarter.

The results are consistent with the research conducted by Utami et al. (2016) in which they applied Relating, Experiencing, Applying, Cooperative, Transferring (REACT) strategy in learning which proved to increase learning motivation and participation. They incorporated multiple activities in facilitating learning to bring a new atmosphere and motivate learners to enrich learning experiences for better outcomes. The study by Amira (2018) also suggested that the problems of students in reading can be solved through the application of various kinds of reading strategies which she incorporated the Read, Cover, Remember, Retell Strategy (RCRR) to improve students' achievement in Reading Comprehension.

Aside from these factors, researchers have found out that students' entry reading comprehension skills influence the result of the research. The participants of this research were identified from schools in far-flung areas of Davao del Sur and Davao Occidental where internet connectivity and access to media is limited and inadequate. The same result was presented by Palencia (2009) that students have a higher chance of improving their performance when exposed to different forms of media. Viewing and listening to films, clips and other media can improve students' receptive and communicative skills, and vocabulary (Spada & Lightbown, 2010). This shows that since the participants were less exposed to media and language, they have lower entry reading comprehension level than the average Grade 8 students.

Additionally, Puspita et al. (2020) suggested that the learning model should comprise an active, creative, and interesting process. While 4Rs strategy is made to specifically address student difficulties in reading to improve comprehension, it is made to make reading interactive and engaging so students foster a love for reading as well. As observed during the research, participants were also able to engage with the text more while reading, and express themselves through retelling, reacting, and reflecting. Conclusively, the learning process that incorporated features of active learning trigger students to think distinctively and to analyze effectively (Iskandarwassid & Sunendar, 2011). Furthermore, the current study uses reading activities to improve the comprehension level of students related to the study conducted by Jiang (2016) which accounts for oral reading strategies and comprehension level of students, while providing evidence for the efficacy of reading strategies. Thus, the results presented in this study are found to be consistent with the findings presented by Jiang (2016).

Generally, the results of this research have proven that students learn better when interventions are done extensively and intensively. Therefore, 4Rs strategy is found to be effective in improving Grade 8 students' level of comprehension and there is a significant difference in their comprehension level after using 4Rs strategy.

6. LIMITATIONS AND RECOMMENDATIONS

This study comprised students from the far-flung area who were 13 – 14 years old learners at Barayong National High School, Pedro Mariscal National High School, and New Sibonga National High School. All these schools are located in Mindanao, Philippines. The intervention used in this study aims to address only the reading comprehension considering the grade level of the participants. In general, the researchers have determined that 4Rs Strategy is useful and helpful in improving students' reading comprehension. The researchers recommend this strategy as an intervention for students under frustration level and as a metacognitive strategy for students at instructional and independent levels. The researchers will employ this strategy to promote and improve reading comprehension in their respective schools. 4Rs may also be adapted by their individual Schools Division. It is also recommended that future studies expand the scope of the research to other sections of a scholarly research paper and broaden the sample of the study to include the primary pupils who are in the early stages of developing reading comprehension.

7. CONCLUSION

Teaching students to read with combined reading comprehension strategies has significantly improved the learners' reading proficiency. The findings exhibited that the strategy employed helps process the reading text, resulting in better comprehension. All the steps in the 4R strategy are proven to develop the reading competency of the learners. Based on the results of this study, 4R strategy is effective in improving and enhancing students' reading comprehension. This study also shows that despite the increase in the post-test results after utilizing the 4Rs strategy, there was no movement in the comprehension level of the learners using the Philippine Informal Reading Inventory (Phil-IRI) Assessment Tool, thus, the Phil-Iri set high standards when it comes to reading comprehension level.

REFERENCES

- [1] Ahmadi, M. R., Ismail, H. N., & Abdullah, M. K. K. (2013). The Importance of Metacognitive Reading Strategy Awareness in Reading Comprehension. *English Language Teaching*, 6(10), 235-244.
- [2] Alaga, N. A. C., & Palencia, R. S. (2015). Media Exposure and Students' Communicative English as Second Language (ESL) Performance. *Countryside Development Research Journal*, 3(02), 71-81.

- [3] Alyousef, H. S. (2006). Teaching Reading Comprehension to ESL/EFL Learners. Albaya Intermediate School, Riyadh, Saudi Arabia
- [4] Amira, F. (2018). The Implementation of RCRR (Read, Cover, Remember, Retell) Strategy to Improve Students Achievement in Reading Comprehension. Repository Universitas Muhammadiyah Sumatera Utara
- [5] Avison, D., Lau, F., Myers, M., Nielsen, P. A. (1999). Communication of the ACM, Volume 42, Issue 1.
- [6] Bayat, N. (2020). The impact of ellipses on reading comprehension. In International Online Journal of Education and Teaching (IOJET) (Vol. 7, Issue 4). <http://iojet.org/index.php/IOJET/article/view/1042>
- [7] Beck, I. L., & McKeown, M. G. (2001). Text talk: Capturing the benefits of read-aloud experiences for young children. *The reading teacher*, 55(1), 10-20.
- [8] Brooks, J. G., & Brooks, M. G. (1999). In search of understanding: The case for constructivist classrooms. Ascd.
- [9] Carrell, Patricia L. & Eisterhold, J.C. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17(4), 553-573.
- [10] Carrell, Patricia L., Pharis, B. G., & Liberto, J. C. (1989). Metacognitive strategy training for ESL reading. *TESOL Quarterly*, 23(4), 647-678
- [11] Casing, P. I. (2018). Improving Mathematics Performance Among Grade 11 Students Through Jigsaw Technique. Manlin, Buug, Zamboanga Sibugay, Philippines
- [12] Clark, J.S., Porath, S., Thiele, J., Jobe, M. (2020) Action Research. Kansas State University Libraries
- [13] Creswell, J. W. (2014). Qualitative, quantitative and mixed methods approaches. Sage.
- [14] Deped Memorandum No. 173, s. 2019. Bawat Bata Bumabasa Initiative
- [15] Dowhower, S.L. (1999) Supporting a strategic in the classroom, and Reading comprehension for helping teachers help students to be strategic.
- [16] Flippo, F (2014). Reading assessment and Instruction received glowing reviews for its unabashed belief in the capabilities of students.
- [17] Forrest-Pressley, D. L., & Waller, T. G. (2013). Cognition, metacognition, and reading (Vol. 18). Springer Science & Business Media.
- [18] Frazier, L., Carlson, K., & Clifton Jr, C. (2006). Prosodic phrasing is central to language comprehension. *Trends in cognitive sciences*, 10(6), 244-249.
- [19] Frey, V. J. (2008). Importance of teaching reading comprehension with nonfiction texts. University of Northern Iowa
- [20] Grabe, W. (1991). Current Developments in Second Language Reading Research. *TESOL Quarterly*, 25, 375-406. doi:10.2307/3586977
- [21] Grabe, W. (2002). Dilemmas for the development of second language reading abilities. *Methodology in language teaching: An anthology of current practice*, 276-286.
- [22] Gunning, S (2003) The role of readability, considering the contexts of readers, and texts. Associated Professor in Program in American Culture.
- [23] Habók, A., & Magyar, A. (2018). The effect of language learning strategies on proficiency, attitudes and school achievement. *Frontiers in psychology*, 8, 2358.
- [24] Harris, A. (2004). Improvement of the students reading comprehension University of Warwick, School of Education.
- [25] Harris AD, McGregor JC, Perencevich EN, Furuno JP, Zhu J, Peterson DE, Finkelstein J. The use and interpretation of quasi-experimental studies in medical informatics. *J Am Med Inform Assoc*. 2006 Jan-Feb;13(1):16-23. doi: 10.1197/jamia.M1749. Epub 2005 Oct 12. PMID: 16221933; PMCID: PMC1380192.
- [26] Hazzard, K. (2016). The Effects of read alouds on student comprehension.
- [27] Helardez, C. M. (2015). Reading Comprehension Level and Vocabulary Skills of Grade II Pupils and their Academic Performance in English of St. Paul University Philippines
- [28] Israel, S. & Duffy, G. G. (2009). Handbook of Research on Reading Comprehension. New York
- [29] Jafar, M. & Rahman, A. (2019). Exploring Teachers' Perception of Professional Development in Indonesian EFL Classroom. *Asian EFL Journal Research Articles*. Vol. 25 Issue No. 5.2
- [30] Jiang, X. (2016). The role of oral reading fluency in ESL reading comprehension among learners of different first language backgrounds. *Reading Matrix: An International Online Journal*, 16(2), 227-242

- [31] Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness* (No. 6). Harvard University Press.
- [32] Johnson & Kress, & Pikulski, (1987). *Informal Reading Inventories in Amazon*
- [33] Kasmawati, Geminastiti, S. (2020). Improving students reading comprehension through “survey, question, reading, recite, review (SQ3R)” strategy. Universitas Muhammadiyah SidenrengRappang, Universitas Negeri Makassar
- [34] Kasper, M., Uibu, K., & Mikk, J. (2018). Language teaching strategies’ impact on third-grade students’ reading outcomes and reading interest. *International Electronic Journal of Elementary Education*, 10(5), 601-610.
- [35] Keppel, G. (1991). *Design and analysis: A researcher’s handbook* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- [36] Kintsch, W., & Walter Kintsch, C. B. E. M. A. F. R. S. (1998). *Comprehension: A paradigm for cognition*. Cambridge university press.
- [37] Kintsch, W., Patel, V. L., & Ericsson, K. A. (1999). The role of long-term working memory in text comprehension. *Psychologia*, 42(4), 186-198.
- [38] Klauda, S. L., & Guthrie, J. T. (2008). Relationships of three components of reading fluency to reading comprehension. *Journal of Educational psychology*, 100(2), 310.
- [39] Lijano, H. B. *Motivational Factors on Learning in a Constructivist Classroom: A Strategy on Learning from 21st Century Learners*. *International Journal of Humanities, Arts and Social Sciences*, 4(2), 85-95.
- [40] Lingard, B. (2005). Socially just pedagogies in changing times. *International studies in sociology of education*, 15(2), 165-186.
- [41] Lonigan, C. J., Anthony, J. L., Bloomfield, B. G., Dyer, S. M., & Samwel, C. S. (1999). Effects of two shared-reading interventions on emergent literacy skills of at-risk preschoolers. *Journal of Early Intervention*, 22(4), 306-322.
- [42] Luz, M. J. (2007). *Literature and Literacy: A Nation of Non-Readers*.
- [43] Maki, R. H., & McGuire, M. J. (2002). Implications for education. *Applied metacognition*, 39.
- [44] Manaog, N. R. S. (2020, January 23). Why students have poor reading comprehension. *The Manila Times*
- [45] McKown, B. A., Barnett, C. L. (2007). *Improving Reading Comprehension Through Higher-Order Thinking Skills*. Saint Xavier University, Chicago, Illinois
- [46] Miia, R (2019) Supporting struggling readers. *Technology Research and Development*.
- [47] Mitchell, R. (2015). ‘If there is a job description I don’t think I’ve read one’: a case study of programme leadership in a UK pre-1992 university. *Journal of Further and Higher Education*, 39(5), 713-732.
- [48] Muhid, A., Amalia, E. R., Hilaliyah, H., Budiana, N., & Wajdi, M. B. N. (2020). The Effect of Metacognitive Strategies Implementation on Students’ Reading Comprehension Achievement. *International Journal of Instruction*, 13(2), 847-862.
- [49] National Center for Educational Statistics, & Institute of Education Sciences (US). (2007). *Mapping 2005 state proficiency standards onto the NAEP scales: Research and development report*. DIANE Publishing.
- [50] National Center for Educational Statistics, United States. Office of Educational Research, Improvement. Center for Education Statistics, & Institute of Education Sciences (US). (2009). *The condition of education*. US Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- [51] Niatu, N. E., & Puji, A. P. (2018). Need Assessment Implementation of Story Books in Basic School. *International Journal of Humanities, Arts and Social Sciences*, 4(1), 15-21.
- [52] Pourhosein Gilakjani, A., & Sabouri, N. B. (2016). How Can Students Improve Their Reading Comprehension Skill? *Journal of Studies in Education*, 6(2), 229. <https://doi.org/10.5296/jse.v6i2.9201>
- [53] Puspita, L., Komarudin, K., & Astriani, M. (2020). Analysis of problem-solving skills: Impact of guided inquiry learning model based on Islamic values. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 6(2), 347-354.
- [54] Rastegar, M., Kermani, E. M., & Khabir, M. (2017). The relationship between metacognitive reading strategies use and reading comprehension achievement of EFL learners. *Open Journal of Modern Linguistics*, 7(02), 65.
- [55] Reutzell, D., Cooter R. (2018). *Teaching children to read: The teacher makes difference*.

- [56] Rraku V. (2013). The effect of reading strategies on the improvement of the reading skills of students. University of Tirana, Branch of Saranda, Albania
- [57] Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). *Effective Reading Instruction for Struggling Readers: The Role of Direct/Explicit Teaching*
- [58] Sagor, R. (2000). *Guiding school improvement with action research*. Ascd.
- [59] Sagor, R. (2011). *The action research guidebook: A four-stage process for educators and school teams*. Corwin Press.
- [60] Schwanenflugel, P. J., & Benjamin, R. G. (2016). The development of reading prosody and its assessment. *Linguistic rhythm and literacy*, 187-213.
- [61] Singhal, M. (2001). *Reading Proficiency, Reading Strategies, Metacognitive Awareness and L2 Readers. The Reading Matrix*.
- [62] Singleton, C. (2009). *Intervention for dyslexia. A review of published evidence on the impact of specialist dyslexia teaching*.
- [63] Snow, D., Cress, D., Downey, L., & Jones, A. (1998). Disrupting the "quotidian": Reconceptualizing the relationship between breakdown and the emergence of collective action. *Mobilization: An International Quarterly*, 3(1), 1-22.
- [64] Spada, N., & Lightbown, P. M. (2010). *Second language acquisition. An introduction to applied linguistics*, 108-123.
- [65] Spencer, T. (2011). Learning to Read in the Wake of Reform: Young Children's Experiences with Scientifically Based Reading Curriculum. *Penn GSE Perspectives on Urban Education*, 8(2), 41-50.
- [66] Sumarmi, 2012, *Model-Model Pembelajaran Geografi*, Aditya Media Publishing, Malang
- [67] Tomas, M. J. T., Villaros, E. T., & Galman, S. M. A. (2021). *The Perceived Challenges in Reading of Learners: Basis for School Reading Programs*. Nueva Ecija University of Science and Technology, Cabanatuan City, Philippines
- [68] Urquhart, A. H., & Weir, C. J. (2014). *Reading in a second language: Process, product and practice*. Routledge.
- [69] Utami, W. S., Surnami, Ruja, N., & Utaya, S. (2016). *React (Relating, Experiencing, Applying, Cooperative, Transferring) Strategy to Develop Geography Skills*. Faculty of Social Science, State University of Malang
- [70] Van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*.
- [71] Whitehurst, G. J., Arnold, D. S., Epstein, J. N., Angell, A. L., Smith, M., & Fischel, J. E. (1994). A picture book reading intervention in day care and home for children from low-income families. *Developmental psychology*, 30(5), 679.
- [72] Williams, E., & Moran, C. (1989). Reading in a foreign language at intermediate and advanced levels with particular reference to English. *Language Teaching*, 22(4), 217-228.
- [73] Wixson, K., Peters, C., Weber, E., & Roeber, I. (1987). New directions in statewide reading assessment. *The Reading Teacher*, 40(8), 749-755.
- [74] Zhang, L., & Seepho, S. (2013). Metacognitive strategy use and academic reading achievement: insights from a Chinese context. *Electronic Journal of Foreign Language Teaching*, 10(1).

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