

RESEARCH ARTICLE

EFFECTIVENESS OF METACOGNITION-BASED READING ENRICHMENT PROGRAM TO STUDENTS' READING COMPREHENSION

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Abstract

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..... The main focus of this study is to determine the effectiveness of the metacognition-based reading enrichment program to the students' reading comprehension. The pretest-posttest non-equivalent control group design which falls under the quasi-experimental design was used. On the test of significant difference between the formative test mean scores of the experimental and comparison groups, it was found out that the formative tests had significant effect to the respondents' reading comprehension. Moreover, based on the computed Cohen's d value, the lessons have a small top medium effect size. It was revealed that there is a significant difference between the posttest mean scores of the experimental and comparison groups at 0.01 level of significance. Moreover, based on the computed Cohen's d value of 0.98, the effect size of the metacognition-based reading enrichment program to the students' reading comprehension based on the posttest is large. There is a significant difference between the formative test mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program. Furthermore, Cohen's effect size values suggested a small to medium practical significance. There is a significant difference between the posttest mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program. Furthermore, Cohen's effect size value (d=0.98) suggested a substantial effect of the metacognition-based reading enrichment program to the respondents' reading comprehension. As for the recommendations, it was noted that there is a need for English teachers to integrate the instruction of metacognitive strategies, as it helps in improving students' reading comprehension.

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Introduction:-

Metacognition may be defined as the awareness and understanding of one's own thought processes (English Oxford Dictionaries, 2009). To simply restate it, it refers to 'thinking about thinking'. It includes knowledge about when and how to use particular strategies for learning or for problem-solving.

Metacognition in reading, or metacognitive reading awareness, refers to one's awareness of the strategies that can be used in order to increase understanding of the text. Though there are a number of reading strategies, they are generally grouped into three categories: global reading strategies, support reading strategies, and problem-solving reading strategies.

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Global reading strategies are used to work with text directly or to manage and monitor their reading intentionally and carefully. Problem Solving Strategies are used for solving problems of understanding that arise during the reading of a text. Support Reading Strategies are used as basic mechanisms intended to aid reading comprehension (Mokhtari &Sheorey, 2002).

Having high metacognitive awareness, or awareness of strategies that can be used, is said to be a predictor of high level of reading comprehension.

On the other hand, reading comprehension is the ability to process text, understand its meaning, and to integrate it with what the reader already knows. It requires students to be able to relate what they have read to their background knowledge, as opposed to merely reading the text.

Reading comprehension is a very important skill students must possess. Rutzler (2017) pointed out that in a school environment, it is crucial for students to have excellent comprehension skills, for comprehension is used in other subjects such as math, science and history. For instance, in math, students are given word problems. Without reading comprehension skills, students would find it difficult to determine what needs to be solved. In Science, proper reading comprehension would help students understand facts about animals, plants, the Solar System, the scientific method, and others.

Because of this, it has been maintained by experts in the field of education that reading comprehension is a predictor of academic achievement. In fact, during the conduct of the Regional Training of Teachers on the Pedagogical Retooling in Mathematics, Languages and Science, or PRIMALS Plus, teachers of all fields were encouraged to integrate the teaching of reading in all subject areas, because every teacher is considered to be a reading teacher.

The Department of Education (DepEd) has continuously aimed to improve the reading comprehension of public school students, through the implementation of different projects. For instance, the implementation of the Every Child a Reader Program can be observed in all public elementary schools in the country. It is a national program that addresses the thrust of DepED to make every Filipino child a reader at his/her own level. It is designed to equip elementary pupils with strategic reading and writing skills to make them independent young readers and writers. It also provides a year-long training for teachers to make them multi-literate and independent problem solvers (Department of Education Region XII, 2014).

Also, the Philippine Informal Reading Inventory is conducted yearly to assess the reading level of elementary and secondary students, through the virtue of DepEd Order No. 14, s. 2018 entitled "Policy Guidelines on the Administration of the Revised Philippine Informal Reading Inventory".

However, despite of these efforts, there are still students in the secondary level who are still in the frustration level, which means that they can read given texts, but they cannot really understand what they have read.

The researcher decided to pursue this study about the effectiveness of a metacognition-based reading enrichment program to, by some means, help students in improving their reading comprehension.

Background of the Study:

Reading comprehension is a skill that each student must possess. It is a skill that has influence over the academic achievement of a student.

Despite this, reading comprehension has always been one of the problems of English teachers in the City Schools Division of Cabuyao. It is a fact that the researcher himself noticed. Whenever there is a chance that English teachers come together, one of the topics of conversation would be the decline of the reading comprehension levels of students every year. This is the reason why it has been a practice of the schools in the division to develop and offer reading programs to address the need to enhance the reading comprehension of the students. The City Schools Division of Cabuyao also shows support to such programs by awarding the school deemed as the best reading program implementer.

The Department of Education acknowledges this problem as well. In a 2007 interview, Dr. Yolanda Quijano, then head of the DepEd's Bureau of Elementary Education, attributed "reading problems as the main culprit for the poor

performance of some students in the NAT." Her observation is indeed alarming. Hence, if a student's reading comprehension is poor, chances are his or her performance in other subjects would be compromised (Philippine Star, 2010).

Different projects are being implemented to solve this problem. For instance, the implementation of the Every Child a Reader Program (ECARP) can be observed in all public elementary schools in the country.

Another effort of the department in addressing this problem can be seen in DepEd Order No. 14, s. 2018 entitled, "Policy Guidelines on the Administration of the Revised Philippine Informal Reading Inventory". The Phil-IRI used as a classroom-based assessment tool aims to measure and describe the learners' reading performance in both English and Filipino languages in oral reading, silent reading and listening comprehension. These three types of assessment aim to determine the learner's independent, instructional and frustration levels.

Table 1 shows the Phil-IRI results for the school years 2016-2017 and 2017-2018. Furthermore, the table reports that for the school year 2016-2017, majority (2003, or 41.14) of the students were classified under frustration, and it decreased a little for the school year 2017-2018 (36.71). However, it is sad to note that for the two school years, the students under the independent group were outnumbered by the other two. Moreover, the table also shows that a great number of readers under the frustration and instructional levels were still present in the higher grade levels.

Table 1:- Cabuyao	Integrated National	High School Phi	l-IRI Results for	or the School	Years 2016-2017	and 2017-
2018.	-	-				

Grade Level		2016-2017	2017-2018			
	Frustration	Instructional	Independent	Frustration	Instructional	Independent
Grade 7	787	496	93	549	447	186
Grade 8	567	387	351	490	612	188
Grade 9	378	478	268	522	433	277
Grade 10	271	565	228	177	452	402
TOTAL	2003	1926	940	1738	1944	1053

For the school year 2018-2019, the Phil-IRI was discontinued for Grades 8-10, and instead was conducted only to Grade 7 students. Also, a change in the scheme was introduced. In the earlier years of Phil-IRI, students were given a pretest to determine their reading comprehension level. In this year's program, a pretest is still given, but all students who got a score of 14 and below are subject to reading intervention.

The Phi-IRI for the school year 2018-2019 reports that almost 80% of the Grade 7 students, or 1166 out of 1461, performed unsatisfactorily in the reading comprehension pretest, which means that they are in need of extensive guidance in reading.

However, as established in the earlier results of the Phil-IRI, the problem does not exist in Grade 7 only. There are still students in the higher levels who belong to the frustration and instructional levels.

One of the factors that the researcher thought to have influence over the students' reading comprehension is their metacognitive reading awareness, or knowing different strategies in reading, and being able to use them correctly and efficiently. During the first quarterly evaluation, the researcher noticed that among the test items that got the highest number of wrong responses are those items that require students to analyze given excerpts or passages. These can be easily answered if the students applied varied reading strategies such as noting details, using context clues, and others.

It is then imperative that these strategies be taught to the students, especially to those who belong to the frustration and instructional levels. Because of this, the researcher decided to implement a reading enhancement program that focused on improving the students' reading comprehension through teaching them different metacognitive strategies that they can use when they are reading.

This research was conducted at Cabuyao Integrated National High School, a school situated at Brgy. Poblacion Tres, City of Cabuyao, Laguna. It is currently headed by Ms. Maribeth G. Herrero, the officer-in-charge of the school,

under the supervision of Mrs. Belen Gimutao and Dr. Doris DJ Estalilla, the Public Schools District Supervisor of District III-A and the Schools Division Superintendent of the City Schools Division of Cabuyao, respectively.

Theoretical Framework:

A number of theories may be associated when it comes to reading. Some of theseare discussed in the succeeding paragraphs.

Pearson (2019) stated that bottom-up theories of the reading process depend on phonetic awareness and word-byword decoding strategies. Comparing reading to solving puzzles, she argued that early reading skills build upon each other until students are reading with fluency and high levels of comprehension.

Bottom-up theorists believe that before a student learns how to read, there are several prerequisite skills that he must attain. These skills are: print awareness, or the student's ability to recognize letters versus ordinary shapes and lines; phonetic awareness, or the student's ability to recognize how a letter or a certain combination of letters is supposed to be pronounced; decoding, which is when students sound out each letter or letter combination in a word, and; finally, reading fluency, which is the final step of bottom-up reading theories.

In a separate article, Pearson (2019) also discussed the top-bottom theory of reading. Using this theory, teachers make the students read by introducing them to literature as a whole. Instead of teaching students to read by sounding out each word in a sentence, teachers read whole passages of a text. Students begin to use context clues to decipher unfamiliar words.

Another theory that relates to this research is that of Nelson and Narens' (1990) Model of Metacognition (Cambridge Assessment International Education, 2015). This consists of two levels: the object level and the meta level, which is shown in Figure 1.



Figure 1:- Nelson and Narens' Model of Metacognition.

It is in the object level where one's cognitive processes, or one's thinking, occurs. At the object level, cognitive strategies (e.g., decoding) are used to help the learner achieve a particular goal (understanding the meaning of the text).

On the other hand, in the meta level, metacognitive strategies are used to ensure the learner reaches the goal they have set. Terms involved in this level are monitoring and control. Monitoring refers to the reader's act of checking whether he/she have clearly understood what had been read. If the reader is happy with his comprehension level, then he/she would continue reading the text. If not, then the learner would apply strategies that would further make him/her understand the text better, such as re-reading the paragraph, or decide to use references, such as a dictionary, to help him understand the text better. This is where control comes in, because the learner changes his behaviour and his cognitive processes based on the feedback that he got from monitoring his understanding of the text.

Ultimately, the theory that is much related to this research is the Metacognition Theory which was developed by John H. Flavell in 1979. This theory encompasses the processes of planning, tracking, and assessing one's own understanding or performance.

Flavell identified two elements of metacognition: metacognitive knowledge and metacognitive regulation.

Knowledge of cognition or metacognitive knowledge refers to an individual's awareness of his/her own cognitive resources in relation to the task (Pintrich, 2002; cited in Lai, 2011). Simply, it refers to the learner's awareness of his/her own cognitive strengths and weaknesses, as well as the cognitive requirements of the learning situation. On the other hand, regulation of cognition or metacognitive regulation refers to what learners do about learning (Cambridge Assessment International Evaluation, 2015).

Conceptual Framework:

Figure 2 shows the conceptual framework of the study. It is divided into two parts: the independent variable and the dependent variable. An independent variable is a variable whose change is not affected by any other variable in the experiment, while the dependent variable is what is being studied and measured in the experiment (Sarikas, 2018).



Figure 2:- Research Paradigm.

The independent variables are the approaches that were used for both groups that are involved in the study. The experimental group was subjected to the metacognition-based reading enrichment program, while the comparison

group was not. The dependent variables are the students' reading comprehension assessment such as their formative test scores, and their post-test scores.

Statement of the Problem:

This study aimed to determine the effectiveness of the metacognition-based reading enrichment programto the students' reading comprehension.

Specifically, it sought to answer the following questions:

- 1. What are the pretest mean scores of the respondents in the comparison and experimental groups?
- 2. What is the level of reading comprehension of the respondents in the comparison and experimental group according to the pretest?
- 3. What are the formative test mean scores of the respondents in the comparison and experimental group under the metacongition-based reading enrichment program?
- 4. What are the post-test mean scores of the respondents in the comparison and experimental group under the metacognition-based reading enrichment program?
- 5. What is the level of reading comprehension of the respondents in the comparison and experimental group according to the posttest?
- 6. Is there a significant difference between the formative test mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program?
- 7. Is there a significant difference between the posttest mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program?

Hypotheses:

The following are the hypotheses of this study:

There is no significant difference between the formative test mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program.

There is no significant difference between the post-test mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program.

Significance of the Study:

This research is deemed to be significant, as it offers a solution to a problem faced by the students in the public school system that is poor reading comprehension. The results of this study may be utilized as a reference for a more comprehensive and student-friendly reading enrichment program.

Furthermore, this study is anticipated to contribute additional information to serve the following individuals and/or organizations.

English Program Supervisors may deem this study significant. This study may serve as a basis for the development of reading enrichment programs at the Division level.

The School Heads will also find this study beneficial. This study may serve as a basis for the development of a reading enrichment program for their respective schools.

With this study, English teachers will also benefit because they will be aware of the importance of teaching the students not only what they need to know, but also how to know.

The primary beneficiary of this study will be the Grade 9 students. This study will serve as a means for them to be able to gauge their reading comprehension levels and improve them with the help of metacognition.

Lastly, Future Researchers may use this study as their basis on the pursuit of a similar research undertaking.

Scope and Limitations of the Study:

The aim of this study was to assess the effectiveness of the metacognition-based reading enrichment program to the students' reading comprehension.

This said reading enrichment program was implemented to grade 9 students of Cabuyao Integrated National High School during the school year 2018-2019 who were selected through match-pairing. The reading enrichment program was implemented during the third quarter of the mentioned school year. It consisted of session plans using 4As (Activity, Analysis, Abstraction, Application) that were used to teach students metacognitive strategies that they can use in reading. The metacognitive strategies that were taught to the students were limited to Using Context Clues, Drawing Inferences, Finding the Main Idea, Summarizing, Paraphrasing, and Using Graphic Organizers.

This research was conducted at Cabuyao Integrated National High School, a school situated at Brgy. Poblacion Tres, City of Cabuyao, Laguna.

To make the study more manageable, age and sex were not included as variables.

Definition of Terms:

To aid in understanding and for ease of reading, the following terms are hereby defined operationally:

Comparison Group:

This term refers to the group of respondents who did not undergo the reading enrichment program, but whose scores in the post-test served as a basis on whether the program is effective or not.

Experimental Group:

This refers to the group of students who underwent the reading enrichment program.

Frustration:

The reading level of students who got 58% and below in the reading comprehension test. In this study, this term was used to refer to the respondents under the metacognition-based reading enrichment program who got 58% and below in the reading comprehension test.

Formative Test:

This refers to comprehension tests that were given to the respondents after every session.

Independent:

The reading level of students who got 80-100% in the reading comprehension test. In this study, this term was used to refer to the respondents who got 80-100% in the reading comprehension test.

Instructional:-

The reading level of students who got 59-79% in the reading comprehension test. In this study, this term was used to refer to the students under the metacognition-based reading enrichment program who got 59-79% in the reading comprehension test.

Metacognition:-

This refers to the processes used to plan, monitor, and assess one's understanding and performance.

Metacognition-based reading enhancement program:-

A researcher-developed reading program that aims to improve the respondents' reading comprehension by teaching them different metacognitive strategies that they can use in reading.

Pre-Test:-

This refers to the reading comprehension test adapted from Alferez (2009) that was administered to Grade 9 students of Cabuyao Integrated National High School, which was the basis of match pairing.

Post-Test:-

This refers to the reading comprehension test adapted from Alferez (2009) that was administered to the responents at the end of the experiment. The scores in this test served as the basis of the effectiveness of the reading enrichment program.

Reading comprehension level:-

This refers to whether a respondent is an independent, instructional or frustrated reader.

Reading strategies:-

This term is used to describe the planned and explicit actions that help readers translate print to meaning. In this study, this term refers to the strategies that were taught to the respondents, namely, Using Context Clues, , Drawing Inferences, Using Graphic Organizers, Finding the Main Idea, Summarizing, and Paraphrasing.

Respondents:-

This refers to the Grade 9 students of Cabuyao Integrated National High School during the school year 2018-2019 who were selected through match pairing.

Review Of Related Literature And Studies:

This chapter presents a thematic review of related literature and studies that the researcher has perused to shed light on the topic under study. Furthermore, this chapter contains different information from articles, books, Internet sources and other researches that are used as references to develop a better understanding of the topic.

On Reading Comprehension:

Rutzler (2017) pointed out that although many children can read, reading and reading comprehension are two different things. While the first word involves merely translating and decoding text into sounds and spoken words, the latter involves not only reading the words, but also deriving meaning from them. There are, however, a number of definitions given by other authors.

Lenz (2014) defines reading comprehension as the process of constructing meaning from the text. It is an undertaking that involves at least two parties: the writer and the reader. The reader is the one responsible in decoding the meaning of the writer's message.

Grabe (2012), on the other hand, offers a somewhat deeper definition of reading comprehension. According to him, it is the ability to process text, understand its meaning, and to integrate it with what the reader already knows. To elaborate, it is not enough that the reader understands what the text is about, but a reader must be able to relate the ideas within the text with his/her prior knowledge about the subject matter.

Reading Rockets (2015) seems to agree with this definition. According to an online article published in the said site, for the readers to be able to fully understand a text, they need to be able to (1) decode what they read; (2) make connections between what they read and what they already know; and (3) think deeply about what they have read. This statement implies that for reading comprehension to be achieved, readers must learn how to think beyond the text, that is, to evaluate what they have read.

Although different in construction, the above definitions seem to be pointing out the same idea: that reading comprehension is a complex process that involves not only being able to read printed words, defining these words, but also being able to integrate reading with thinking and reasoning. It is what separates passive unskilled readers from active readers. Skilled readers don't just read, they interact with the text (Brooks, 2014). As Grabe (1998; cited in Umali, 2013) put it, reading is a communication between the reader and the text.

In an article published in Owlcation, Hutura (2019) differentiated the three levels of comprehension. Literal comprehension involves what the author is actually saying, which means that the reader needs to understand ideas and information explicitly stated in the reading material. Inferential comprehension, on the other hand, deals with what the author means by what is said. In this level, the reader is asked to read between the lines and make inferences about things not directly stated by the author. Finally, critical comprehension concerns itself with why the author says what he or she says. This high level of comprehension requires the reader to use some external criteria from his/her own experience in order to evaluate the quality, values of the writing, the author's reasoning, simplifications, and generalizations. Basically, the readers in this level are asked to analyze, synthesize, and make judgments on the author's ideas.

Lee (2017) identified six essential skills needed for reading comprehension. The first is decoding, which readers use to sound out words that they have heard before but have not seen written out. This skill relies on an early language

skill called phonemic awareness, which enables readers to hear individual sounds in words. The said skill also relies on the ability of the reader to connect each sound to its corresponding symbol or the letter it represents.

Next is fluency. This skill relies on a skill called word recognition, which is the ability to recognize whole words instantly by sight, without sounding them out. Fluency speeds up the rate at which they can read and understand the text.

Among the skills needed for comprehension is vocabulary, which is a key component of reading comprehension. It is only logical, because the readers will not understand what they are reading if they do not know what the words in the text mean.

Sentence construction and cohesion is also included. Knowing how ideas link up at the sentence level helps the learners get meaning from passages and entire texts. It also leads to coherence, or the ability to connect ideas to other ideas in an overall piece of writing.

Reasoning and background knowledge is also a skill needed in comprehension. Most readers relate what they read to what they know, so background knowledge really plays a role in comprehension. They also need to be able to "read between the lines" and deduce the meaning of the text even though it is not explicitly stated.

Lastly, working memory and attention are both part of a group of abilities known as executive function. They're different but closely related. Attention allows them to take in information from the text. Working memory allows them to hold on to that information and use it to gain meaning and build knowledge from what they're reading.

According to Stewart (2012), there are two types of reading comprehension skills: the concrete comprehension skills and the abstract comprehension skills. The first skill includes the ability to answer questions when the information being asked is explicitly stated in the reading selection. It involves skills such as vocabulary, finding the main idea, identifying facts and opinions, sequencing of events, following instructions, and reading for details. On the other hand, abstract comprehension skills include making inferences, evaluation, drawing conclusions, and identifying cause and effect. These skills require the reader to draw on prior knowledge and processing to identify what is not explicitly stated.

Hutura (2019) differentiated the three levels of comprehension. Literal comprehension involves what the author is actually saying, which means that the reader needs to understand ideas and information explicitly stated in the reading material. Inferential comprehension, on the other hand, deals with what the author means by what is said. In this level, the reader is asked to read between the lines and make inferences about things not directly stated by the author. Finally, critical comprehension concerns itself with why the author says what he or she says. This high level of comprehension requires the reader to use some external criteria from his/her own experience in order to evaluate the quality, values of the writing, the author's reasoning, simplifications, and generalizations. Basically, the readers in this level are asked to analyze, synthesize, and make judgments on the author's ideas.

Reading comprehension is a very important skill students must possess (Umali, 2013). Brooks (2010) pointed out that reading comprehension increases the pleasure and effectiveness of reading. Strong reading comprehension helps in all other subjects and in the personal lives. Furthermore, Tánczikné (2017) reports that since learning highly depends on the comprehension of information from text sources, reading comprehension is really fundamental in every academic discipline. Rutzler (2017) adds that in a school environment, it is crucial for students to have excellent comprehension skills, for comprehension is used in other subjects such as math, science and history. For instance, in math, students are given word problems. Without reading comprehension skills, students will find it difficult to determine what needs to be solved. In Science, proper reading comprehension will help students understand facts about animals, plants, the Solar System, the scientific method, and others.

In a study conducted by Boonen, Koning, Jolles&Schoot (2016) to find out whether semantic-linguistic elements of a mathematical word problem influence word problem solving success, it was found out that even successful problem solvers experienced difficulty in solving semantically complex word problems. Because of this, the researchers concluded that reading comprehension skills should be given a more prominent role in word problem solving instruction. Akbasli, Sahin&Yaykiran (2016) also found out that there is a correlation between reading comprehension results and student success in Mathematics and Science classes when they compared the Programme for International Student Assessment results of 15 different countries.

Simbulas, Regidor &Catulpos (2015) conducted a study among 115 first year students of the University of the Immaculate Conception. Using the Pearson – Product Moment Correlation and Linear Regression as statistical tools, the results of the study showed that a significance of relationship exists between reading comprehension and problem solving skills. The researchers were also able to underscore vocabulary as the best predictor to problem-solving skills. A similar study was conducted by Jordan (2018) to determine the relationship between English proficiency and mathematics performance of the grade six students in cluster 3 Malabog District, Davao City. The study reported that the respondents' English proficiency is low, their vocabulary, grammar, and reading comprehension are at the beginning stage, and their mathematics performance was at the approaching proficiency stage. Furthermore a significant relationship was found between the students' vocabulary and their mathematics performance.

Even though reading comprehension is very important, there are still students who are below the proficiency level of reading comprehension. In fact, poor reading comprehension is cited as a fundamental feature of underperformance in South Africa (Pretorius, 2002, as cited in Vasay, Bilbao &Donguila, 2016).

The International Assessment of the Adult Competencies Literary Scale (2012) in the United States of America recorded that adults achieved an average literacy proficiency score of 270 on a scale of 0 to 500 or three points below the international average of 273. Such low score may be attributed to the fact that these adults failed to enhance their reading comprehension skills during their younger years, or while they were in school.

In the Philippines, a study conducted by Cabasan (2011) revealed that out of 33 college students, only two (6%) were categorized in the independent level, 11 (33%) were in the instructional, and 20 (61%) were in the frustration level. It is also sad to point out that only two college students could read with thorough understanding of the text they are presented with without assistance from other people. Moreover, more than half of the students are classified under the frustration level, which means they are struggling to understand the meaning of the text. These students need intervention in order for them to cope with the demands of their current educational level.

The study of Vasay, Bilbao &Donguila (2016), revealed that the reading comprehension level of the 124 Education students of one of the Catholic universities in Davao is at the moderate level only. It is somewhat disappointing knowing that the respondents of the said study are already in the collegiate level, and are hoping to be teachers, nonetheless. If such problem exists in the tertiary level, what more in the lower levels?

Cabardo (2015) studied the reading comprehension level of Year 1 to year 3 students in a certain high school in Davao, using the Phi-IRI as the tool to measure the reading comprehension level of the students. The results revealed that majority if the students belong to the frustration level in silent reading. Furthermore, the results showed that male students are outperformed by the female ones in reading comprehension.

Furthermore, in the study of Adriano (2015) where the implementation of Every Child A Reader Program (ECARP) in a public elementary school in Bulacan was assessed, it was found out that the implementation of the said program is not effective, as there is no significant difference on the pretest and post-test results of the 771 pupils from grades one to three. Moreover, the researcher recommended that the implementation of ECARP be discontinued, and other reading interventions be applied to the pupils.

Some studies have shown that reading comprehension of the students is affected by several factors. Rizardo and Tabuno (1998, cited in Umali, 2013) in their study about the reading comprehension of fourth year high school students of Iligan, identified the following as contributing factors to the reading comprehension of the students: a. parents' monthly income and educational attainment; b. the kind of materials read; c. attitude toward reading, and; d. availability of reading materials at home and school. Educational researchers have also identified the teacher's behavior as a factor that affects reading comprehension (Brophy, 1986, as cited in Umali, 2013).

On Metacognition:

The term metacognition was coined by John H. Flavell in 1979 (Gaerlan, 2013). It is defined in simplest terms as "thinking about one's own thinking." The root "meta" means "beyond," so the term refers to "beyond thinking."

Specifically, this means that it encompasses the processes of planning, tracking, and assessing your own understanding or performance. It was used by Baker and Brown (1984, as cited in Forastero, 2012) to refer to two separate but somewhat interdependent phenomena: knowledge about cognition and regulation of cognition.

Knowledge about cognition, or metacognitive knowledge (Cambridge Assessment International Evaluation, 2015), refers to an individual's awareness of his/her own cognitive resources in relation to the task (Pintrich, 2002, cited in Lai, 2011)). Simply, it refers to the learner's awareness of his/her own cognitive strengths and weaknesses, as well as the cognitive requirements of the learning situation. Flavell (1985, cited in Madeline, 2017; Ahmadi, Ismail, & Abdullah, 2013) said that there are three types of metacognitive knowledge.

The first type is declarative knowledge or "person knowledge," which is the understanding one's own capabilities. This type of metacognitive knowledge may not always be precise, as an individual's self-assessment can easily be unreliable

The second type is procedural knowledge which refers to knowledge about doing things. This type of knowledge is displayed as heuristics and strategies. A high degree of procedural knowledge can allow individuals to perform tasks more automatically. This is achieved through a large variety of strategies that can be accessed more efficiently.

The third, conditional knowledge, refers to knowing when and why to use declarative and procedural knowledge. That is, knowing when and why a certain strategy should be used.

Meanwhile, regulation of cognition, or metacognitive regulation, refers to what learners do about learning (Cambridge Assessment International Evaluation, 2015). Baker and Brown (1984, as cited in Pitrinch, 2002) enumerated the essential aspects of metacognitive regulation: planning, which involves determining or accepting a purpose of reading and initial selection of appropriate strategies based on the characteristics of the text; monitoring, or checking whether or not strategies used are working or comprehension is occurring, and; revision, which pertains to modifying strategies if necessary.

Ahmadi, Ismail & Abdullah (2013) added one more aspect to metacognitive regulation, which is evaluation. It is defined as appraising the conclusion and regulatory processes of an individual's learning. In this aspect, the reader evaluates whether the use of a certain strategy helped in the accomplishment if the goal that was identified during the planning phase, that is, better comprehension of the text.

Takallou (2011) conducted a study to investigate the effect of the instruction of metacognitive strategies, planning and self-monitoring, to reading performance. The researcher concluded that planning strategy instruction has a significant effect on the respondents' reading performance, as the experimental group outperformed the control group. It was also concluded that self-monitoring strategy instruction has a significant effect to the reading performance of the respondents, with the experimental group obtaining higher scores than the control group.

On the other hand, a study was conducted by Nurfadhilah (2016) to assess the metacognitive knowledge and regulation of 33 senior high school students in Bandung, Indonesia. Using a questionnaire and interview, it was found out that the students are aware of their cognition during reading. The metacognitive regulation strategy that students used the most was comprehension monitoring, which includes noticing confusions, using background knowledge and recognize when something is new, formulation of questions about what is being read, and making inferences (Adler, 2017). On the other hand, the least metacognitive regulation skill used was information management strategies. Furthermore, a higher frequency of metacognition was seen in high- and medium- achiever students. Low-achievers failed to maintain the use of strategies consistently from the planning stage before reading up to the evaluation stage after reading.

Perkins (1992, as cited in Cambridge Assessment International Evaluation, 2015) defined four levels of metacognitive learners. The first level is the tacit learners, who are unaware of their metacognitive knowledge. They do not think about any particular strategies for learning and merely accept if they know something or not.

Aware learners, the second level, know about some of the kinds of thinking that they do such as generating ideas, finding evidence etc. However, thinking is not necessarily deliberate or planned.

The next level is strategic learners, who organize their thinking by using problem-solving, grouping and classifying, evidence-seeking and decision-making etc. They know and apply the strategies that help them learn.

Finally, there are reflective learners. They are not only strategic about their thinking but they also reflect upon their learning while it is happening, considering the success or not of any strategies they are using and then revising them as appropriate. Meaning, they evaluate their use of a certain strategy, whether it helped them achieve their purpose or not.

Much of the research on metacognition has been related to learning and achievement in reading. Research in the fields of psychology and education point to the active and strategic nature of reading (Krajenord, 2010). Proficient readers continually monitor their own thoughts, controlling their experience with the text and enhancing their understanding (Gaither, 2009). They engage in constructively responsive reading which involves reading with a purpose and actively constructing meanings from text. In fact, studies have posited the superiority of skilled and cognitively-mature readers on the effective employment of metacognitive reading strategies (MacLean &d'Anglejan, 1986; cited in Razi and Cubucku, 2014).

One way of engaging with the text is using metacognitive strategies in reading. Meniado (2016) defines metacognitive strategies as those acts that encourage readers to be aware of their own thinking process while they are reading. During reading, there are three factors relating to metacognition: (a) reflection on the ongoing reading process (e.g., comprehension monitoring), (b) the strategic activities triggered by this reflection, and (c) the metacognitive knowledge base from which these activities are derived (Artelt and Schenider, 2015; cited in Nurfadhilah, 2016). Because of this, many researchers investigated the effects of explicit metacognitive strategy instruction to the reading comprehension of students.

For instance, Ahmadi, Ismail & Abdullah (2013) differentiated proficient and poor readers in terms of their use of metacognitive strategies in reading. According to them, less proficient readers do not use metacognitive reading strategies but proficient readers utilize metacognitive reading strategy while reading texts. Furthermore, Readers who use metacognitive reading strategy in their reading comprehension are more successful than other readers who do not utilize this strategy in reading comprehension process. These findings were congruent with the study of Anastasiou&Griva (2009), where it was found out that good readers have better awareness of metacognitive strategies than poor readers.

In a study conducted by Korotaeva (2012) to investigate the metacognitive strategies employed by education majors to their reading comprehension, it was revealed that the comprehension level of education majors is low. Such result was attributed to ineffective use of metacognitive strategies, after a test to identify the correlation of metacognitive reading strategies and reading comprehension was performed.

Sitthiprom (2012) conducted a study to determine whether there is a significant difference between the reading comprehension scores of 21 Grade 11 students in Thailand before and after learning metacognitive strategies. The researcher was able to record the students' average pretest and posttest scores on English reading comprehension ability were 55.83% and 80.24%, respectively. Using t-test for dependent samples, it was concluded that the posttest scores of the students were significantly higher after learning metacognitive strategies.

This is supported by a study of Razi and Cubucku (2014), which investigated the impact of a metacognitive reading strategy training programme (METARESTRAP) on metacognitive reading strategies and reading comprehension. The quasi-experimental study concerned 93 freshmen students of a certain university. The results showed that the said reading program significantly improved the level of reading comprehension of the respondents by providing awareness of metacognition along with declarative, procedural, and conditional knowledge about metacognitive reading strategies.

In the study of Takallou (2011), it was found out that explicit metacognitive strategy instruction significantly improves reading performance. This conclusion was formed form the observation that the students under the experimental group who experienced explicit metacognitive strategy instruction had significantly higher scores when compared to the students under the control group. A similar study undertaken by Sen (2009) produced similar results, where the experimental group which received explicit strategy instruction recorded a significant increase in

the reading comprehension achievement scores when compared to the comparison group which received traditional instruction.

However, the study of Pammu, Amir & Tengku (2014) contradicts the above-stated results. Their study showed that even less proficient learners use metacognitive strategies at a high to medium level. Furthermore, the findings have also indicated that while the metacognitive strategy was associated with consistent increases in reported strategy use, it did not bring about corresponding increases in the observed reading performance.

On Reading Strategies:

Reading strategies is the broad term used to describe the planned and explicit actions that help readers translate print to meaning (Reading Horizons, 2017). There are a number of reading strategies that a reader can use in order to increase his or her understanding of the text.

Using context clues is one of the easiest strategies that may be used by readers to increase their understanding of a certain text. Nordquist (2018) defines context clues as hints that the author gives to help define a difficult or unusual word, and appear near a word or phrase and offers direct or indirect suggestions about its meaning.

In the study of Fink (1998; cited in Bailey, 2019) that focusedon literacy development in successful men and women with dyslexia, it was indicated that they relied on context clues, both during the study and in everyday reading, to aid in comprehension and using said strategy significantly increased their reading comprehension.

Mirza (2011) conducted a study to investigate the effects of context clues on reading comprehension. Using 34 university students as respondents of the study, it was concluded that context clues have significant effects on the students' reading comprehension. Furthermore, the following types of context clues were ranked from easiest to hardest: example context clues, definition context clues, and appositive context clues.

Another skill that improves reading comprehension is drawing inferences. It is defined as a comprehension strategy used by proficient readers to "read between the lines," make connections, and draw conclusions about the text's meaning and purpose (Koci and Chadron State College, 2013). It is drawing conclusions based on information that has been implied rather than directly stated and is an essential skill in reading comprehension (Bailey, 2018). According to Marzano (2010), it is a "foundational skill" — a prerequisite for higher-order thinking and 21st century skills.

In the study of Attaprechakul (2013) that investigated the inference strategies used by eighty-eight (88) graduate students to improve reading comprehension of journal articles, it was found out that the subjects relied more on their bottom-up processing. This means that they had no problem answering questions in the literal level, but they performed poorly on comprehension questions that asked them to infer. They skipped difficult parts, especially technical information andgraphic illustrations. Also, they were less able to infer the underlying argument, the tone of the article, and the attitudes of others toward the research findings.

However, this result is contradicted by the results of the study of Azizmohammadi (2013). In her research which investigated the effects of drawing inferences to students'm reading comprehension, it was found out that the students in the experimental group, who were taught inference strategies, significantly outperformed those students in the control group when a recall test was administered two weeks later.

Finding the text's main idea is also one of the strategies that may be used to improve reading comprehension. Roell (2019) defines the main idea as the primary point or concept that the author wants to communicate to the readers about the topic. Questions about the main idea of a passage are popular on reading comprehension tests, but sometimes, those questions are pretty difficult to answer, especially for students who are not completely sure they understand what the main idea really is. Finding the main idea of a paragraph or longer passage of text is one of the most important reading skills to master.

In the study of Attaprechakul (2013), it was found out that most of the graduate students who served as respondents had difficulty in identifying the main ideas of the selections they were asked to read, especially if the main idea is not explicitly stated. This poses a problem, because finding a text's main idea is an essential reading comprehension

skill for our students to develop (Literacy Ideas, 2018). Students that become skilled in this art will benefit from it far beyond the perimeters of the school gates.

In addition, Boudah (2013) emphasized in his study that the main idea strategy has the potential to improve the performance of students with and without disabilities who struggle with reading comprehension. When this strategy is implemented with fidelity, students clearly have the potential to become more successful readers.

In the study of Brown (2018), it was concluded that the explicit instruction of finding the main idea to high school students significantly improved their reading comprehension.

Another strategy that students may use is summarizing. Reading Rockets (2017) defines summarizing as discerning the most important ideas in a text, ignoring irrelevant information, and integrating the central ideas in a meaningful way. It teaches students how to take a large selection of text and reduce it to the main points for more concise understanding.

Often teachers assume that summarizing is the same for both writing and reading. However, the purpose and task of summarizing is considerably different for these literary activities. Pennington (2015) emphasized that while the purpose of a writing summary is to identify the main or controlling idea or argument with supporting major details to put the thrust of exposition into a nutshell, the purpose of a reading summary is to build comprehension.

In the study of Zafarani and Kabgani (2014), findings indicated that the explicit instruction on summarizing strategy can effectively contribute to enhancing the ability and aptitude of ESP learners in comprehending reading and can help them build up a constructive attitude toward English reading in Iranian context, as proven by the significantly higher posttest scores of the experimental group when compared to the comparison group. In a similar study conducted by Khoshsima (2014), it was also concluded that that summarizing strategy has a significant effect on learners' reading comprehension.

Paraphrasing is also an effective strategy in improving reading comprehension. According to Sousa (2014), effective paraphrasing incorporates reading, writing, listening, and speaking, thereby activating the brain's frontal lobe and leading to a fuller comprehension of the course material. It can be used in all content areas and it can help students learn from many different types of texts, including fiction and nonfiction.

In the study conducted by Suwanto (2014), it was concluded that explicit paraphrasing instruction had a significant effect on students' reading comprehension. It was seen that the group of respondents that received paraphrasing instruction outperformed the group of respondents that did not. A similar conclusion was made by Escudero, Fuertes, & Lopez (2018) when they studied the effectiveness of paraphrasing strategy to the reading comprehension of Ecuadorian students.

Another strategy that may be used by readers is using graphic organizers. According to the Learning Disabilities Association of America (2013), graphic organizers are visual thinking tools that make pictures of one's thoughts. The pictures demonstrate relationships between facts, concepts, or ideas, and guide one's thinking as he/she designs the map or diagram. Shanahan (2013) adds that graphic organizers can also enhance reading comprehension by helping students to categorize information and to show the relationships among important concepts.

In the study of D and Rajan (2012) that investigated the effects of using graphic organizers in improving the reading comprehension skills of middle school ESL students, result of the post-test suggested that the experimental group students have improved in all the five types of reading questions compared to controlled groupstudents. Therefore, using graphic organizers is effective in reading questions like (1) identifying the main idea, (2)finding the supporting details, (3) dealing with vocabulary and (4) fact and opinion & (5) making inferences. Moreover, the pedagogical implication here is the use graphic organizers during reading comprehensionsessions indirectly motivates the students to create their own graphic organizer for the passages they read and comprehend.

Research Methodology:-

This chapter contains the discussion on the following: research design, respondents of the study, research instrument, research procedure, and statistical treatment of data.

Research Design:

This study is quantitative in nature. Quantitative research "is the systematic empirical investigation of observable phenomena via statistical, mathematical or computational techniques" (Given, 2008). This research is quantitative because it utilized statistical techniques to test the effectiveness of the researcher-developed metacognition-based reading enrichment program.

Furthermore, this study used the pretest-posttest non-equivalent control group design which falls under the quasiexperimental design. The respondents were grouped into two groups: the comparison and the experimental group. The members of each group were determined through match pairing which was done by conducting a pre-test among the 5 sections that the researcher is handling.

The experimental group underwent the reading enrichment program, and the comparison group will not. At the end of each session, a formative test was given to monitor the effects of the program to the respondents' reading comprehension. At the end of the program, both the experimental and comparison groups were given a post-test to measure the effectiveness of the said program.

Respondents of the Study:

This study was conducted at Cabuyao Integrated National High School, a secondary school found at Limcaoco Subdivision, Poblacion Tres, City of Cabuyao, Laguna.

The respondents are those students classified under instructional and frustration reading levels who were selected among the 5 sections that the researcher is handling through a process called match pairing.

The researcher used a process called match pairing to identify the respondents of the study. The researcher selected five sections that will be involved in this study: 9-Venus, 9-Poseidon and 9-Saturn for the comparison group, and 9-Mercury and 9-Zeus for the experimental group. Furthermore, the respondents in each group are classified according to their reading comprehension level: frustration and instructional.

The students in these sections were given the same pre-test to test their reading comprehension, and those who got the same score in the said test from the two groups were considered a pair, and became respondents in this study. A total of 42 pairs, 19 for the instructional level and 23 for the frustration level, was formed, which means that this study utilized a total of 84 respondents.

Furthermore, out of 84 respondents, 42 (50%) are male and 42 (50%) are female.

Research Instrument:

This research utilized two instruments: the first was a test to measure the students' reading comprehension, which was used as the pre-test and the post-test, and the reading enrichment program itself.

The reading comprehension test was adapted from Alferez (2009). It consisted of 50 multiple-choice items, in which the students were asked to read paragraphs and answer questions that followed.

On the other hand, the intervention material consisted of a collection of researcher-made session plans that the researcher implemented in the duration of the study. There were different session plans for each reading comprehension level: frustration and instructional. These session plans folowed the 4As (Activity, Analysis, Abstraction and Application) and aimed to improve the respondents' reading comprehension by teaching them different strategies that they can use in reading. Specifically, the strategies that were included in the reading enrichment program are Using Context Clues, Drawing Inferences, Using Graphic Organizers, Finding the Main Idea, Summarizing, and Paraphrasing.

The instruments were checked and validated by experts in the field of teaching language and reading: a Teacher III and English Subject Coordinator, a Master Teacher II, and a Head Teacher III. The validation was based on the following criteria: Overall Instructional Design and Pedagogy of the Reading Enrichment Program, Comprehension Instruction, Suitability, and Mechanics and Technicalities.

Research Procedure:

After the validation of the instruments of the study, a permission to conduct the study was sought from the Schools Division Superintendent of the City Schools Division of Cabuyao. After it was approved, an endorsement letter was given to the researcher for the scheduling of the distribution of the reading comprehension test to grade 9 students.

The reading comprehension test was collected the same day that it was distributed. The researcher then proceeded with the checking of the test and the categorizing of the students into their respective reading levels.

Match pairing was also done to identify the respondents of the study. Those who belong to the experimental group underwent the reading enrichment program, while those in the comparison group did not. During the implementation of the reading enrichment program, formative tests were given to the respondents. At the end of the program, both groups were given a post-test. The scores obtained by the respondents on the mentioned tests were recorded.

The data gathered was analyzed and treated using different statistical tools and the effectiveness of the metacognition-based reading enrichment program was assessed and determined.

Statistical Treatment of Data:

The descriptive statistics that were used in this study were frequency count, percentage, weighted mean, skewness and standard deviation. These statistics were used to describe the respondents in terms of their reading comprehension level, as well as to describe the scores obtained by the experimental and comparison groups.

Also, t-test was used to determine whether or not there is a significant difference on the formative test mean scores of the experimental and comparison groups. It was also used to determine whether or not there is a significant difference on the mean posttest scores of the two groups.

Furthermore, Cohen's d was used to measure the effectiveness of the metacognition—based reading enrichment program to students' reading comprehension based on their formative test mean scores and their posttest mean scores.

Presentation, Analysis And Interpretation Of Data:-

This chapter deals with the presentation of data, and its analysis and interpretation. The data were collected through a series of tests: a pre-test, six formative tests, and a post-test. These were tabulated and interpreted to solve the problems of the study.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive Interpretation
Experimental	0	39	24.40	11.28	72	Low
Comparison	0	39	24.40	11.28	72	Low

Table 2:- Pretest mean scores of the experimental and comparison groups.

Total number of possible points = 50

Legend: 0-12 - Very Low 13-24 - Low 25-37 - Average 38-44 - High 45-50 - Very High

Table 2 presents the pretest mean scores of the experimental and comparison groups. Moreover, it reports that the highest and lowest scores that the respondents from each group got in the pretest were 39 and 0, respectively, both with the mean of 24.40 and a descriptive interpretation of low. Also, the scores in each group report a standard deviation value of 11.28, which determines the dispersion of the scores with relation to the mean. Furthermore, with the skewness value of -.72, the scores are moderately skewed. In addition, a negative skewness value says that most of the scores are higher than the mean pretest score.

Table 3:- Reading comprehension level of the two groups based on their pretest scores.

Group	Instructional		Frustrat	Total	
	Frequency	Percent	Frequency	Percent	
Experimental	19	45.2	23	54.8	42

Comparison	19	45.2	23	54.8	42

Table 3 reports the reading comprehension level of the experimental and control group based on their pretest scores. Furthermore, it shows that in both groups, there are 19 (45.2%) respondents who belong to the instructional level, and 23 (54.8%) respondents who belong to the frustration level, with a total of 42 respondents.

Moreover, it can be seen that the respondents who belong to the frustration level outnumbered those in the instructional level. This result is somewhat parallel to the result of the Phil-IRI conducted in Cabuyao Integrated National High School for the school year 2016-2017 and 2017-2018, which shows that a greater number of the student population belongs to the frustration level.

This is also parallel with the results of the study of Cabasan (2011) where the students in the frustration level (61%) greatly outnumbered those in the instructional level (33%).

Group	Min.	Max.	Mean	SD	Skewness	Descriptive
_						Interpretation
Experimental	7	10	8.93	1.09	-0.68	Very High
Comparison	5	10	7.45	1.58	0.09	Average
Legend:						
0.00 - 2.49 - Very	Low 2.50 -	4.49 – Low	4.50 - 7.4	9 – Average	7.50 - 8.49 - I	High 8.50 – 10.00 –

Table 4:- First formative test mean scores of the students in the experimental and comparison	groups
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Table 4 shows the first formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in the experimental group, which had undergone instruction on using context clues, obtained a very high mean score of 8.93, while those in the comparison group obtained an average mean score of 7.45.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in the experimental group are negatively skewed, which means that most of the scores are greater than the mean score, while the scores in the comparison group are skewed on the left side of the curve.

These results mirror the findings of Fink (1998, as cited in Bailey, 2019) and Mirza (2011). In the said studies, it was found out that using context clues significantly improved the reading comprehension of the respondents.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive Interpretation
Experimental	7	10	8.79	0.98	-0.37	Very High
Comparison	5	10	7.98	1.37	0.28	High
Legend: 0.00 – 2.49 – Very Very High	Low 2.50 –	4.49 – Low	4.50 - 7.4	9 – Average	7.50 - 8.49 - 1	High 8.50 – 10.00 –

Table 5:- Second formative test mean scores of the students in the experimental and comparison groups.

Table 5 shows the second formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in the experimental group, which received instruction on drawing inferences, obtained a very high mean score of 8.79, while those in the comparison group obtained a high mean score of 7.98.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in the experimental group are negatively skewed, which means that most of the scores are greater than the mean score, while the scores in the comparison group are skewed on the left side of the curve.

Very High

This result is supported by the study of Azizmohammadi (2013) where it was found out that the students in the experimental group, who were taught inference strategies, significantly outperformed those students in the control group when a recall test was administered two weeks later.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive
						Interpretation
Experimental	8	10	9.07	0.89	-0.15	Very High
Comparison	7	10	8.55	1.23	-0.03	Very High
Legend: 0.00 - 2.49 - Very	Low 250 -	4 49 – Low	4 50 - 7 4	0 _ Average	7 50 <u>8 49 </u> Hic	10.00 - 10.00
Very High	LUW 2.30 -	т.т <i>)</i> — LOW	н. <i>30</i> — 7.н	- Average	7.50 – 0.49 – Ille	51 0.50 - 10.00 -

T 11	~	m1 · 1	c				0.1		·	•			
Table	6:-	Third	formative	test r	nean	scores	of the	e students	in the	experimenta	Land	comparison	grouns
1 4010	••	1 1111 04	10111140110		neun	000100	01 1110	braacheb	mi the	onpoi intente	i unu	comparison	Stoups.

Table 6 shows the third formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in both the experimental and comparison groups obtained very high means cores of 9.07 and 8.55, respectively. The respondents in the experimental group received instruction for finding the main idea.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in both groups are negatively skewed, which means that most of the scores of the respondents in each group are higher than their third formative test mean scores.

Boudah (2013) emphasized in his study that the main idea strategy has the potential to improve the performance of students who struggle with reading comprehension. When this strategy is implemented with fidelity, students clearly have the potential to become more successful readers. Finding a text's main idea is an essential reading comprehension skill for our students to develop (Literacy Ideas, 2018). Students that become skilled in this art will benefit from it far beyond the perimeters of the school gates.

However, these results negate the conclusion of Brown (2018) that the experimental group outperformed the comparison group in terms of their reading comprehension test scores. It could be seen on Table 6 that there is not much difference on the mean scores of the two groups, with both of the groups obtaining very high mean scores.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive Interpretation
Experimental	6	10	8.69	1.30	-0.87	Very High
Comparison	3	10	7.36	1.94	-0.70	Average

Table 7:-Fourth formative test mean scores of the students in the exp	perimental and comparison groups
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Legend:

0.00 - 2.49 - Very Low 2.50 - 4.49 - Low 4.50 - 7.49 - Average 7.50 - 8.49 - High8.50 - 10.00 - Very High

Table 7 shows the fourth formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in the experimental group, which received instruction on summarizing, obtained a very high mean score of 8.96, while those in the comparison group obtained an average mean score of 7.36.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in both groups are negatively skewed, which means that most of the scores of the respondents in each group are higher than their third formative test mean scores.

This result is parallel with the result of the studies of Zafarani and Kabgani (2014) and Khoshsima (2014), where it was found out that the instruction of summarizing significantly improved the reading comprehension of the respondents in the experimental group.

Table 8:- Fifth formative test mean scores of the students in the experimental and comparison groups.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive Interpretation
Experimental	7	10	8.52	1.06	-0.07	Very High
Comparison	6	10	7.90	1.25	-0.13	High

Legend:

0.00 - 2.49 - Very Low 2.50 - 4.49 - Low 4.50 - 7.49 - Average 7.50 - 8.49 - High 8.50 - 10.00 - Very High

Table 8 shows the fifth formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in the experimental group, which had undergone instruction in paraphrasing, obtained a very high mean score of 8.52, while those in the comparison group obtained a high mean score of 7.90.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in both groups are negatively skewed, which means that most of the scores of the respondents in each group are higher than their fifth formative test mean scores.

This result is congruent with the results of the study of Suwanto (2014) and Escudero, Fuertes, & Lopez (2018) where it was found out that paraphrasing strategy has a significant effect to the students' reading comprehension. In both studies, students who received paraphrasing instruction had significantly higher posttest scores than the students who did not.

Table 9:- Sixthformative test mean scores of the students in the experimental and comparison groups.

Group	Min.	Max.	Mean	SD	Skewness	Descriptive Interpretation
Experimental	7	10	9.02	0.90	-0.47	Very High
Comparison	5	10	8.00	1.45	-0.15	High

Legend:

0.00 - 2.49 - Very Low 2.50 - 4.49 - Low 4.50 - 7.49 - Average 7.50 - 8.49 - High 8.50 - 10.00 - Very High

Table 9 shows the sixth formative test mean scores of the students in the experimental and comparison groups. It reports that the respondents in the experimental group, which received instruction on using graphic organizers, obtained a very high mean score of 9.02, while those in the comparison group obtained a high mean score of 8.00.

Furthermore, the standard deviation values of both groups indicate that the scores of the respondents in the experimental group are less spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in both groups are negatively skewed, which means that most of the scores of the respondents in each group are higher than their fifth formative test mean scores.

These results mirror the results of the study of D and Rajan (2012) that investigated the effects of using graphic organizers in improving the reading comprehension skills of middle school ESL students, result of the post-test suggested that the experimental group students have improved in all the five types of reading questions compared to controlled group students.

Furthermore, The results of the formative tests confirm the results of the study of Sen (2009) where the experimental group which received explicit strategy instruction recorded a significant increase in the reading comprehension achievement scores when compared to the comparison group.

Table 10:- Postest mean scores of the students in the experimental and comparison groups								
Group	Min.	Max.	Mean	SD	Skewness	Descriptive		
						Interpretation		
Experimental	9	46	31.50	10.77	-0.66	Average		
Comparison	5	37	22.55	8.33	-0.25	Low		

 Table 10:- Posttest mean scores of the students in the experimental and comparison groups

Total number of possible points = 50

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Legend: 0 - 12 - \text{Very Low} 13 - 24 - \text{Low} 25 - 37 - \text{Average} 38 - 44 - \text{High} 45 - 50 - \text{Very High}
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Table 10 presents the posttest mean scores of the experimental and comparison groups. It shows that the highest score obtained in the experimental group is 46 and the lowest score obtained is 9. On the other hand, the highest score obtained in the comparison group is 37 and the lowest is 5. Furthermore, the table indicates that the respondents in the experimental group obtained an average mean score of 31.50, while those in the comparison group sindicate that the scores of the respondents in the experimental group are more spread out compared to those in the comparison group. Moreover, the table indicates that the scores of the respondents in both groups are negatively skewed, which means that most of the scores of the respondents in each group are higher than their posttest test mean scores.

These results confirm the results of the study of Takallou (2011) where it was found out that the students under the experimental group who received explicit metacognitive strategy instruction had significantly higher scores when compared to the students under the control group.

Group	Independent		Instructional		Frustration		Tatal
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Total
Experimental	11	26.2	16	38.1	15	35.7	42
Comparison	0	0	9	21.4	33	78.6	42

Table 11:-Reading comprehension level of the two groups based on their posttest scores

Table 11 presents the reading comprehension level of the respondents in the experimental and comparison groups based on their posttest scores. Out of 42 respondents in the experimental group, 11 (26.2%) are independent, 16 (38.1%) are instructional, and 15 (35.7%) are under frustration. On the other hand, out of 42 respondents in the comparison group, 9 (21.4%) are instructional, while 33 (78.6%) are under frustration.

An improvement can be seen on the level of reading comprehension of the respondents according to the posttest scores when compared to the pretest results. The respondents in the instructional level was reduced by three, while those in the frustration level were decreased by eight.

These results are confirmed by the results of different studies (Mirza, 2011; D and Rajan, 2012; Azizmohammadi, 2013; Zafarani and Kabgani, 2014; Khoshsima, 2014; Suwanto, 2014; Brown, 2018; Escudero, Fuertes, & Lopez, 2018) where it was found out that the explicit teaching of different strategies in reading significantly improved the reading comprehension of the students under the experimental group.

Formative Test	Mean Difference (Exp. vs Comp.)	Computed t-value (df=82)	p-value	Effect Size (Cohen's	Interpretation of Cohen's d
Using Contact Cluss	1.47	1 007**	< 0001	u)	Madium
Using Context Clues	1.4/	4.982	<.0001	0.34	Medium
Drawing Inferences	0.81	3.118**	<.0001	0.34	Medium
Finding the Main Idea	0.52	2.228*	0.029	0.24	Small
Summarizing	1.33	3.708**	<.0001	0.40	Medium
Paraphrasing	0.62	2.448*	0.016	0.27	Small
Using Graphic	1.02	3.895**	<.0001	0.42	Medium
Organizers					

Table 12:-Test of significant difference between the formative test mean scores of the two groups

**Significant at p < 0.01 *Significant at p < .05

Table 12 shows the test of significant difference between the formative test mean scores of the experimental and comparison groups. It reports the mean difference values of 1.47. 0.81, 0.52, 1.33, 0.62, and 1.02 for the first to sixth

formative tests respectively. Furthermore, the formative tests for Finding the Main Idea and Paraphrasing have a p-value of 0.029 and 0.016, respectively, which make them significant at p < .05. On the other hand, the formative tests for Using Context Clues, Drawing Inferences, Summarizing, and Using Graphic Organizers have p-values of <.0001, which make them significant at p < .01.

Moreover, based on the computed Cohen's d value, the lessons on Finding the Main Idea and Paraphrasing have a small effect size on the respondents' reading comprehension. This may be attributed to the small difference on the experimental group and comparison group's posttest mean scores. On the other hand, the remaining lessons have a medium effect size, as the experimental group outperformed the comparison group on the posttests for the said lessons.

Generally, this result is parallel to the result of the studies of Sen (2009) and Takallou (2011) that concluded that the experimental group which received explicit strategy instruction recorded a significant increase in the reading comprehension achievement scores when compared to the comparison group.

Table 13 Test of significant difference between the positiest mean secres of the two groups								
Group	Mean Difference (Exp. vs Comp.)	Computed t-value (df=82)	p-value	Effect Size (Cohen's d)	Interpretation of Cohen's d			
Experimental	8.95	4.262**	<.0001	0.98	Large			
Comparison								

Table 13:-Test of significant difference between the posttest mean scores of the two groups

**Significant at p value < 0.01

Table 13 shows the test of significant difference between the posttest mean scores of the experimental and comparison groups. It reports that there is an 8.95 mean difference on the mean posttest scores of the two groups. Furthermore, based on the computed t-value of 4.262 and p-value of <.0001, it can be said that there is a significant difference between the posttest mean scores of the experimental and comparison groups at 0.01 level of significance.

Moreover, based on the computed Cohen's d value of 0.98, the effect size of the metacognition-based reading enrichment program to the students' reading comprehension based on the posttest is large.

These results are similar to the study of Sitthiprom (2012) where it was found out that there is a significant difference between the reading comprehension scores of 21 Grade 11 students in Thailand before and after learning metacognitive strategies. Using t-test for dependent samples, it was concluded that the posttest scores of the students were significantly higher after learning metacognitive strategies.

Summary, Conclusions And Recommendations:

Presented in this chapter are the results summarized, the conclusions drawn based on the findings and the formulated recommendations aligned to the conclusions.

Summary of Findings:

The following is the summary of findings of the study based on the results of consolidation and interpretation of data gathered.

On the level of reading comprehension of the respondents according to the pretest; Both the experimental and comparison groups obtained a low mean score with a mean of 24.40, with a standard deviation value of 11.28. Furthermore, the scores in both groups are negatively skewed. Moreover, there are 19 (45.2%) respondents who are in the instructional level and 23 (54.8%) respondents who are in the frustration level in both experimental and control groups.

On the formative test mean scores of the respondents in the comparison and control groups; The respondents in the experimental group obtained very high mean scores in all the formative tests given, with the means of 8.93, 8.79, 9.07, 8.69, 8.52 and 9.02 respectively. On the other hand, the respondents in the comparison group obtained a very high mean score on the third formative test with a mean of 8.55, high mean scores on the second, fifth and sixth formative tests with means of 7.98, 7.90, and 8.00 respectively, and average mean scores on the first and fourth formative tests with means of 7.45 and 7.36 respectively. With regard to the dispersion of the scores obtained by the

respondents in each group, it appeared that generally, the scores of those in the experimental group are less spread out than the scores of those in the comparison group. Moreover, the scores of those in the experimental group are more negatively skewed when compared to the scores of those in the comparison group.

On the posttest mean scores of the respondents in the experimental and comparison groups; The experimental group obtained an average mean score of 31.50 in the posttest, while the comparison group obtained a low posttest mean score of 22.55. Moreover, as to the dispersion of the scores, the scores of the respondents in the comparison group are less spread out than the scores of the experimental group, as indicated by the computed standard deviation value of 8.33 and 10.77, respectively. Furthermore, the scores of the respondents from both groups are negatively skewed, which means that most of the scores obtained by the respondents in each group are higher than the groups' mean scores.

On the reading comprehension level of the two groups based on their posttest scores; Based on the posttest, out of 42 respondents in the experimental group, 11 (26.2%) are in the independent level, 16 (38.1%) are in the instructional level, while 15 (35.7%) are in the frustration level. On the other hand, out of 42 respondents in the comparison group, 9 (21.4%) are under the instructional level while 33 (78.6%) are in the frustration level. An improvement could be seen on the level of reading comprehension of the respondents according to the posttest scores when compared against the pretest results.

On the significant difference between the formative test mean scores of the experimental and comparison groups; The formative tests for Using Graphic Organizers and Summarizing have a p-value of 0.029 and 0.016, respectively, which make them significant at p < .05. On the other hand, the formative tests for Using Context Clues, Drawing Inferences, Finding the Main Idea, and Paraphrasing have p-values of < .0001, which make them significant at p < .01. Furthermore, based in the computed Cohen's d value, the lessons on Using Graphic Organizers and Summarizing have a small effect size, while the remaining lessons have a medium effect size.

On the significant difference between the posttest mean scores of the experimental and comparison groups; There is an 8.95 mean difference between the mean posttest scores of the two groups. Furthermore, based on the computed t-value of 4.262 and p-value of <.0001, it can be said that this difference is significant. Moreover, the computed Cohen's d value is 0.98 means that the metacognition-based reading enrichment program has a substantial effect on the students' reading comprehension.

Conclusions:-

Based on the findings of the study, the following conclusions were formulated:

The null hypothesis stating that there is no significant difference between the formative test mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program is rejected. The results revealed that the formative test mean score of the experimental group is significantly different compared to the formative test mean score of the comparison group. Furthermore, Cohen's effect size values suggested a small to medium practical significance.

Also, the null hypothesis stating that there is no significant difference between the posttest mean scores of the students in the comparison and experimental group under the metacognition-based reading enrichment program is rejected. The results revealed that the mean posttest score of the experimental group is significantly different compared to the mean posttest score of the comparison group. Furthermore, Cohen's effect size value (d=0.98) suggested a substantial effect of the metacognition-based reading enrichment program to the respondents' reading comprehension.

Recommendations:-

Based on the conclusions of the study, the following recommendations were formulated:

- 1. There is a need for English teachers to further integrate the instruction of metacognitive strategies, as this will help in improving the reading comprehension of the students.
- 2. There is a need to encourage students to be more aware of the different reading strategies that they can use in order for them to deeply understand what they have read. Different online sources may be used in order for them to learn these strategies by themselves.

- 3. Other variables that were not included in this study, such as age and sex, may be further investigated. Other metacognitive strategies concerning monitoring and regulation may be considered for more in-depth study.
- 4. Further studies can be conducted to verify the results of this study and other metacognitive strategies in other subject areas.

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