
| RESEARCH ARTICLE

Improving Reading Comprehension of EFL Learners through Metacognitive Strategies

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| ABSTRACT

Reading comprehension is one of the core learning abilities that plenty of learners struggle with. Being an active process of reading and extracting meaning from text, this cognitive skill requires effective use of strategic processes. To help the learners perform better in reading comprehension, action research, which aims to identify the effects of metacognitive strategies on the reading comprehension level of the thirty-three Grade-7 L2 learners, was conducted. A validated researcher-made reading comprehension test, observation checklist, and interview guide were used to gather the data. Results show that the reading comprehension level of the learners is average in the pretest and above average in the posttest. As observed, the learners were active while reading the text by making annotations on the text they were reading. Most of them said that they were able to monitor their comprehension by asking questions and making predictions while reading the text. Thus, there is an increase in the reading comprehension performance of the learners after the intervention. Accordingly, metacognitive strategies are useful in developing the reading comprehension performance of the learners.

| KEYWORDS

Metacognition, strategies, reading, comprehension, L2 Learners

| ARTICLE INFORMATION

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1. Introduction

Reading comprehension is one of the most vital skills that learners should have, especially when faced with complex reading materials. For most teachers, however, a learner's difficulty in comprehending remains one of the many problems in the Philippines and some other countries (RAND Reading Study Group, 2002). Educators tend to presume that a learner could decrypt the words and learn quickly, and an in-depth understanding of the text goes automatically; thus, they overlook the necessity of reading comprehension instructions. There is a need to teach reading comprehension skills to the learners for them to learn and think critically and to have a thorough knowledge and understanding of a book or any given academic material.

In fact, researchers explicate the different reading instructions that claim to be effective. However, educators still experience the problem faced by reading teachers in the past years (Willam & Stoller, 2002).

According to Lopez (2001), Philippine society has been confronted by a literacy need of significant proportions, a requirement that has been evolving over the past thirty years. The literacy demands of the workplace have outstripped the literacy levels produced by the educational system. For those who wish to respond adequately to society's obligation and to draw fully from its opportunities, the literacy requirement has increased dramatically. The levels of literacy that were perfectly adequate for productive life fifty years before will no longer suffice in a world that has become more dependent on information technologies. Individuals may need more advanced literacy processes to accomplish the tasks required of them at this advanced level of education and experience higher-order reading, writing, and reasoning.

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Despite the many advanced instructional reading comprehension techniques, learners still suffer from a lack of reading comprehension skills necessary for getting a college degree. This is a major problem in higher education as well as at the secondary level (Perin, 2003-2014). Another problematic situation is the disparity between what the teacher preaches about reading comprehension and what they practice in the classroom. Teachers expect their learners to comprehend what they read but rarely are the learners taught about comprehension (Lopez, 2001). Lastly, less attention is given to training the teachers on how to prepare the learners with critical reading in a multidisciplinary context; thus, until now, reading comprehension remains to be a problem (Rand Reading Study Group, 2002).

Developing the learners' reading comprehension using Metacognitive strategies was developed because of the need to help learners, notably L2 learners, who are fronting more significant demands for a higher degree of knowledge and skills in reading comprehension. The researcher, for the past several years, experienced the same dilemma in the classroom. Based on observations, L2 learners got -an average rating in their reading comprehension class, as projected from the results of their daily formative test. The researcher hypothesized that the lack of interest in reading or the lack of strategies in reading comprehension resulted in poor reading comprehension performance. Hence, this study was conducted.

This study determines the level of reading comprehension of Grade-7 L2 learners before and after using the metacognitive strategies. This study primarily aims to assess the effectiveness of the said strategies in improving the reading comprehension level of the learners.

Specifically, this study seeks to determine:

1. the reading comprehension level of Grade 7 L2 learners before and after the experiment employing the Metacognitive Strategies;
2. the significant difference between the pretest and posttest results on the L2 learners' reading comprehension level;
3. How do learners use metacognitive strategies during group and individual reading comprehension activities?

1.1 The framework of the Study

The Interactive Theory of Muray (cited in Tejero, 2006) states that during reading, the reader and the text interact with each other. Muray's Interactive Theory is related to the present study because reading comprehension is the result of the interaction made by the reader and the text. The one who reads brings to mind his background knowledge during the act of reading and combines his experiences with the information in the document to form a meaningful interpretation of the reading material.

Transactional Theory posits that readers use the knowledge they obtained from their experiences, which in turn helps them to choose an explanation, picture out the message, make the association with what they go through, and effectively link to the reading text (Gunning, 2002). Transactional Theory assumes that the readers may focus not only on obtaining information from the text but also on their past active involvement during reading, as well as the emotion, visual presentations, and memories stimulated by the text. The text is transformed by the reader through his viewpoint; however, the text also alters his standpoint.

The transaction between reader and text creates meaning. Gunning (2002) describes the interaction between reader and text as a transaction. The reader is transformed by the text, and the reader processes the text. It must be noted, however, that there are factors that affect the quality of the transaction: ease of reading, the degree of interest, the organization of the text, and the use of illustration.

Flavel's Metacognitive Theory (cited in Schraw & Moshman, 1995; & Louca, 2008) states that metacognition is made up of both keeping an eye and supervision aspects while the reader reads a text. Louca (2008) defines metacognition as the ability of a person to be consciously aware of his mental and emotional processes and the capacity to willfully and intentionally monitor and supervise those processes.

In the experimental reading comprehension activities carried out for this research, the Grade 7 learners are expected to monitor, evaluate, and check their understanding of the text to ensure better comprehension. The readers need to be aware of their own knowledge, which can supplement their understanding of the text. Their consciousness of their individual cognitive process involves close monitoring of their cognition while reading and employing their schema in reading.

1.1.1 Reading as a Process

Reading is defined as a cognitive activity that entails a response from the one who reads. It can be generalizing, inferring, and designing the next phases based on what one has read (Villamin, 2008). The process of reading involves procedures to attain and

underpin comprehension. These are: perceiving words, comprehending the text, reacting to the text, and integrating the ideas in the text with the readers' prior knowledge (Blay, Mercado & Villarcorta, 2009). Likewise, reading is a process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three elements: the reader, the text, and the activity or purpose for reading (Teaching Comprehension, 2010).

Reading comprehension is affected by a number of factors, including the reader's schema, his ability to recognize words, his reading purposes, the significance of reading for him, and his capability with the different comprehension strategies which will aid him in understanding the meaning deduced in the materials he reads (Dy, 2009).

It is believed that having a purpose for reading enhances comprehension. The capacity to read is a great educational skill (William, 2002, Villamin, 2008 & Weil, 2008). The very aim of reading is to link the thoughts of the text to your background knowledge. In this case, we recognize that the learners' background knowledge is very crucial in understanding a text. The learners' interests and motivation also play an important role in reading comprehension (Martin, 1990).

Reading comprehension is the capacity of a reader to grasp the meaning of the text. The reader does not only decode words, phrases, and sentences but gets the meaning and the whole picture of the text (Kelner & Flynn, 2006; Baraceros, 2005; & Belen, 2003).

The reader should be an active constructor during reading comprehension. According to Wilhelm (n.d.), researchers demonstrated that the meaning in the text should not only be perceived by the readers but should, together with the text, construct the meaning through a transaction. The readers have to bring their schema, including their emotions, feelings, and environment, to the text in order to interact with the text and result in the making of meaning known as comprehension.

1.1.2 Metacognition and Metacognitive Strategies

According to Curpos and Salandan (2007), a metacognitive learning strategy helps learners mentally contemplate what they intellectually deliberate. The learners can engage and monitor their cerebral processes while they are tied up in the act of reading. Ghonsooly (2006) also says that strategies in metacognition are higher-order executive skills that may entail planning for, monitoring, or evaluating the success of a learning activity.

Flavell pioneered the concept of metacognition in 1976 (cited in Lopez, 2001), defined as contemplating one's ideas. During the metacognitive activity, teachers guide the learners to be deliberative thinkers. Teachers will help the learners understand the process of reflecting on the information from the text. Activities such as asking questions, perceiving the visual image, and combining information are ways that help the readers scrutinize their cerebral processes. Additionally, guiding and assisting the learners in the act of reading and providing give-and-take teachings are practices that further develop the learners' reading performance.

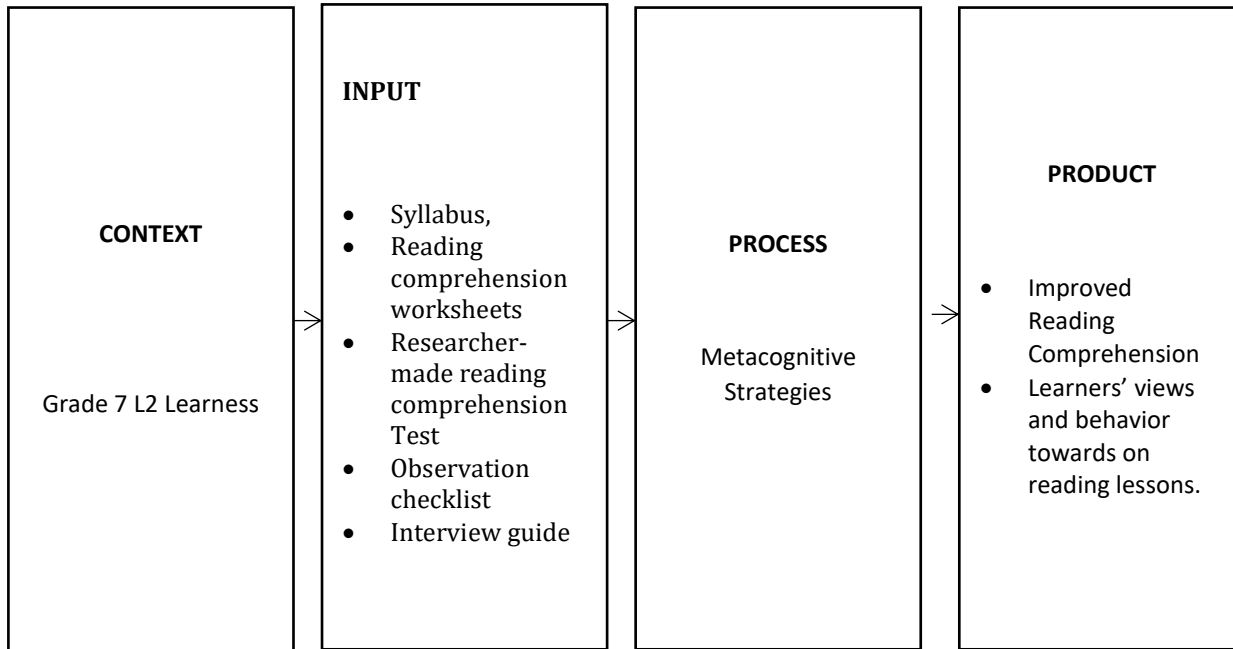
Moore (cited in Agno, 2010) pointed out that "metacognition includes invisible thinking skills such as self-interrogation, self-checking, self-monitoring, analyzing, and mnemonics for classifying and recalling content" (p. 63). Agno (2010) added that metacognition comprises two processes that co-occur in the mind of the reader during reading; these are monitoring the reader's progress when he/she is engaged in learning and being able to make changes and adapt to it as problems happen during the learning process. In reading, the readers have to adjust their pacing. When the text is difficult to comprehend, readers try to digest the material slowly and make amends; on the other hand, be speedy if the text is familiar. The readers must have the ability to predict what is likely to happen or to determine what is sensible and what is not.

To evaluate the effects of the teaching of reading using Metacognitive Strategies and on the theory discussed above, the Context-Input-Process-Product Model (CIPP) by Stufflebeam in 1975 (cited in Yahaya n.d. & Zhang, et al., 2011) was used in this study. The CIPP model has four types of educational decisions, namely: planning decision to determine the objectives supported by context evaluation; structuring decision to design instructional procedures backed by input evaluation; implementation decision to utilize, control, and refine methods supported by process evaluation; and recycling decision to judge or reach the outcome produced by these procedures supported by product evaluation.

Nicholson (cited by Zhang et al., 2011) recommended the CIPP evaluation model to evaluate reading instruction. This model emphasizes "Learning by doing." Stufflebeam (cited in Zhang et al. 2011) stated that the utmost basic concept of this model is not to test but to enhance the developed program for future utilization.

This model is used in the study because metacognitive strategies in reading comprehension are already established methods for improving the learners' reading performance. Thus, this model will serve as an evaluation of metacognitive strategies in terms of their impact on the development of the learners' reading comprehension.

The participants of this study are Grade 7 L2 learners enrolled in the Academic Year 2018-2019 of the National Center for Teacher Education laboratory school. The input components are the syllabus, faculty, and the reading comprehension worksheets designed by the researcher. The process component is the procedural design. It also determined the method or strategies to meet the learning outcomes. In this study, the process used is the Metacognitive strategies for the Grade 7 L2 Learners. Below is the CIPP schematic diagram explaining the research process of this study.

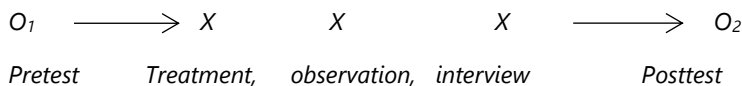


2. Methodology

This study is action research that utilized both the quanti-quali design of research. In the quantitative part, a quasi-experimental design (Calmorin and Calmorin, 2007), specifically the one-group pretest-posttest design (Creswell, 2014), was used. It utilized one intact group of Grade 7 learners who were exposed to the metacognitive strategies to improve their reading comprehension level

Model of One-Group Pretest-Posttest Experimental Design (Creswell, 2014) as applied in Action Research

Group



The symbol O refers to the observation on the measurement of the dependent variable, which is the level of comprehension skill of the learners. The symbol X represents the exposure of the group to the treatment, which is the Metacognitive strategies, the observation done by the teacher, and the interview after each reading session. The measurement of the dependent variable comes before and after treatment X, through the pretest and the posttest

A validated and reliable teacher-made reading comprehension test was used in gathering the data. This test was constructed by the researcher to measure the reading comprehension level of Grade 7 learners. The reading comprehension test included the following: noting details, evaluating judgment, drawing a conclusion, drawing inferences, getting the main idea and supporting details, recognizing fact from opinion, and getting information. This researcher-made test was composed of twenty multiple-choice questions that each contained four possible answers.

In the qualitative part, an observation checklist and open-ended questionnaire were used to gather the data. An observation checklist was used daily by the researcher to record the activity of the learners while reading text materials. Open-ended questions were used by the researcher through semi-structured interviews to gather information about how learners use metacognitive strategies and what common metacognitive strategies are used by the learners.

The study was conducted in only one section of Grade 7, composed of thirty-three (37) learners of the Laboratory school of the National Center for Teacher Education Visayas Campus.

The following procedures were followed during the conduct of the study.

2.1 Pre-implementation

First, the researcher sought permission to conduct the study from the Head of the laboratory school through a formal letter bearing the nature and purpose of the study. As soon as the consent was granted, the researcher, who was likewise a teacher of English 7, took the names of the learners who enrolled in Grade 7 for the Academic Year 2018-2017. Then, the learners were given a validated reading comprehension test as a pretest.

2.2 Actual implementation

In the first week of the session, the researcher extensively oriented the learners on the metacognitive strategies to be used during the teaching of the lesson. The orientation was done with the aid of a PowerPoint presentation. In the second week, the researcher started his first lesson on reading comprehension, which was extended up to the eighth-week session.

While the learners were reading the text materials, the researcher used an observation checklist to check the activities of learners while they were reading. After each class session, the researcher randomly invited four learners to talk about their activities while they were reading and how did they perform their tasks. Their answers were recorded and transcribed.

2.3 Post-implementation

After the implementation, the learners were given a posttest on reading comprehension. Next, the researcher secured, tallied, and tabulated all the data. Focused Grouped Discussion was conducted to capture the experiences of the learners during the nine-week sessions and to determine their insights regarding the reading lessons they received.

2.4 Data Processing and Statistical Treatment

The statistical techniques used in the interpretation of data and the testing of the null hypotheses of the study included the following:

For Problem number one, the mean and standard deviation were used, while on Problem number two, the paired t-test was used, and the level of significance (α) was set to 0.05 level of confidence. Data were then processed and analyzed. For problem number three, the answers of the learners had undergone thematic analysis protocol.

3. Results and Discussion

The reading comprehension level of the learners before and after the experiment is shown in Table 1. The result indicates that the reading level of the learners in the pretest is average ($M=9.91$, $SD=2.94$), while their posttest is above average ($M=12.65$, $SD=2.29$). The result simply means that there is an increase in the reading performance of the learners after experiencing metacognitive learning strategies.

Table 1. *The reading comprehension level of Grade 7 learners before and after the experiment*

Category	Mean	SD
Metacognitive Strategies		
Pretest	9.91	2.94
Posttest	12.65	2.29

Scale Range	Interpretation
16.21 - 20	Outstanding
12.41 - 16.2	Above Average
8.61 - 12.4	Average
4.48 - 8.6	Below Average
1.00 - 4.8	Needs Improvement

Table 2 shows the significant difference in the learners' reading comprehension level between the pretest and posttest employing the Metacognitive Strategies in their reading lesson. The t-test computation reveals a substantial disparity in the pretest and posttest in reading comprehension level of the learners $t(32) = 7.782, p = .000$. The result shows that the Metacognitive Strategies is effective in improving the reading comprehension of the Grade 7 learners.

Table 2. *T-test Results on the Difference in the Learners' Reading Comprehension Using Metacognitive Strategies*

Compared groups	DF	Mean	SD	t-ratio	t-Prob.
Metacognitive strategies					
Pretest	32	9.91	2.94	7.782	.000
Posttest		12.65	2.29		

P < .05 Significant at .05 alpha

As mentioned earlier, the results on the effectiveness of the Metacognitive were supported by the study conducted by Ghonsooly (2006), Takallou (2011), and William & Stoller (2002): that the use of metacognitive strategies in the teaching of reading comprehension has a positive impact to the reading performance of the learners. Lopez (2001), Yuko (2011), and Takalou & Noor (2011) maintain that the use of metacognitive reading strategies indicates a definite increase in the subjects' reading performance. Their studies proved that using metacognitive strategies in the teaching of reading can help learners improve their reading comprehension skills.

Chana et al. (2015) reviewed several studies on the effectiveness of metacognitive strategies in developing the learner's reading comprehension. They found out that metacognitive strategies help learners in improving their reading skills of the learners and promoting a better grasp of the text based on their needs. Three studies (O'neil, 1992; Karbalaei, 2010; Tregaskes & Daines, 2010) had found the same results on the effectiveness of Metacognitive strategies in reading comprehension.

The studies of other researchers have proven that metacognitive strategies are useful in developing the reading comprehension of learners.

Observable Metacognitive Strategies used by the Grade 7 learners while reading

Based on the result of the observation checklist, the following are the observable metacognitive strategies used by the learners while reading. It is ranked based on the most common strategies used to the least common strategies used.

Taking down notes was commonly used by the learners. The researcher observed that the learners were using their pens and were writing down on a separate paper the significant ideas they had read in the text. When they were asked why they were taking down notes, their reasons were the following:

- Learner A: *"Because I can easily recall if the ideas that I have read will be written in my notebook."*
- Learner B: *"I will no longer read the text again and again when I am going to study for a test; all I have to do is to use my notes to study and to recall the things that I have read in the book."*
- Learner C: *"Taking down notes for me is the easiest way to understand the text that I have read."*

Learner D: *"Note-taking is my hobby, and I have done these techniques since grade school."*

The second most commonly used metacognitive strategy of grade 7 learners is highlighting. As observed by the researcher, the students were using colored highlighter pens to underscore the important ideas in the text they were reading. The following reasons are the following:

Student E: *"I use highlighting as a technique in recalling important details of the story."*

Student G: *"I love colors, and I learned fast if there are colors on the text. Colors would remind me of ideas. In other words, colors can be associated with ideas; that is why I have a different colored highlighting pen."*

Visual mapping is the third common strategy used by Grade 7 learners. As observed in the class, the learners were making different diagrams. When these learners were asked why they were making visual maps, their answers were the following:

Student F. *"I draw a diagram to visualize the interrelationships of the ideas in the text."*

Student G: *"I draw a diagram to know the connections of the character in the story."*

Student H: *"Visual Map can help me turn the text into a picture. Text is difficult to understand; pictures can be easily understood."*

Lastly, doing marginal annotation, Memorizing facts, Doing mnemonics, discussing with peers, and constructing a question were the least common metacognitive strategies used by Grade 7 learners.

4. Conclusion

The study examined how metacognitive strategies influenced Grade 7 learners in improving their reading comprehension performance. Findings revealed that in the pretest, the level of performance of the learners' reading comprehension is average, while in their posttest, the level of learners' reading comprehension is above average. When the pretest and posttest were compared, results showed that the level of the learners' reading performance was significantly different. There was an increase in the reading performance of the learners before and after the treatment. It is concluded that metacognitive learning strategies contribute to the development of the learners' reading comprehension performance. As observed, there are observable metacognitive strategies used by the students, and these become their preferred strategies to easily learn the text materials. It is concluded that students are using metacognitive strategies while reading.

Although practitioners in the academe have postulated that reading teachers must have some strategies and techniques in teaching reading to cater to the needs of every individual learner, it is also a must that a reading teacher must make an effort to try one strategy in a reading lesson. This is to test if the strategy is effective or not. The reading teacher cannot help the learners develop their reading comprehension unless a trial of all the strategies available is made. Reading teachers should stop complaining about the learners' lack of reading comprehension skills; instead, teachers should find a strategy that will boost their learners' reading comprehension. Hence, this paper has only explored metacognitive strategies to develop the learners' reading comprehension performance. However, this does not generalize that this particular strategy in reading is useful and recommended for all types of learners. Applying different strategies to match the learning capacity and style of different learners is still the utmost concern of a reading teacher.

Another idea that came out from this study is that learners have already preferred learning styles and preferred metacognitive strategies, which they are always using when they read. Teachers will boost the learners to maximize their preferred strategies for their full potential. Thus teachers should not compel the learners to use strategies that they are not comfortable with.

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