AUGMENTING SENIOR SECONDARY ESL LEARNERS' READING SKILLS THROUGH EXPLICIT INSTRUCTION OF METACOGNITIVE STRATEGIES

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Abstract: Reading and comprehending a text or selection in a language that is different from one's native tongue can be a daunting task to many English as a Second Language (ESL) learners due to several reasons. Hence, teachers' instructional strategies play a pivotal role in developing students' reading skills. This study used a quasi-experimental design to discover the effects of using explicit or direct teaching of metacognitive strategies on the reading skills of students—comprehension skills and vocabulary. Forty grade 11 ESL students from a Chinese–Filipino school in Manila were selected through convenience sampling to be participants of the study. The performance of the two groups in comprehension and vocabulary was compared through pre-test and post-test. Using two-tailed t-test of dependent means, the significant difference between students' performance in the reading comprehension test and the vocabulary test after the intervention was determined. Based on the results, there is no question that one's comprehension and vocabulary size could be improved using explicit teaching of metacognitive strategies. The study has practical implications to the teaching of reading among ESL learners. Recommendations for future research are also provided in this paper.

Keywords: *metacognition, reading, comprehension, vocabulary, pedagogy*

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INTRODUCTION

Reading is both a process and a product. Reading, as a process, makes use of symbols and characters to be decoded and to relate to previous knowledge or experiences for understanding to take place. Brown (2001) views reading as a communication skill that requires the readers to extract meanings from a printed matter by relating their old knowledge about the material to the reading text. This process entails not only knowledge in linguistic features or structure but also an interplay of what is being presented on the text and what is in store in the mind of the readers waiting to be tapped.

As a product, reading has the end goal of achieving a certain level of comprehension from a text read. This can be achieved with various reading strategies that help the readers to comprehend what is being read. The RAND Reading Study Group (2002) stated that comprehension is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). Thus, reading as a product, must be grounded on an enriching strategy to accumulate, store and gather knowledge and skill that are necessary in the attainment of reading comprehension.

Although reading has been regarded as a gateway for academic and professional success (Bandura, 1994), most students find difficulty in understanding a reading text due to poor comprehension skills (National Reading Panel, 2000; Torgeson, 2002; Miranda, Soriano & Garcia, 2006; Lipka, 2010) and limited vocabulary size (Caccamise & Snyder, 2005; Cain & Oakhill, 2011). In the Philippine context, such problems in reading have been very evident as reflected by the low scores obtained in the National Achievement Test by the Filipino students (Ordinario, 2013) as well as the deteriorating performance in reading and language classes. These problems also prevent these students in the active participation in school and for the opportunities which await them in the future. Unfortunately, in the past, language teaching focused mainly on the prescribed curriculum given to the teachers, and as a result, teachers simply promote a one-way flow of

instructional methodology where the teacher is in most cases an authority instead of a facilitator (Avila & Baetiong, 2012). This study addresses some of these issues by investigating potential effects of employing direct instruction of metacognitive strategies to Filipino students' comprehension and vocabulary skills which are viewed as essential components for reading success in the ESL context.

The researchers present this study as an essential tool in employing the explicit or direct teaching of metacognitive strategies to improve the comprehension and vocabulary skills of selected senior secondary students. Specifically, this study seeks answers to the following research questions:

1. What is the performance of Control and Experimental Groups in Reading Comprehension and Vocabulary Test?
2. What is the increase of Performance in Reading Comprehension of the Control and Experimental Group?
3. What is the increase of Performance in Vocabulary Test of the Control and Experimental Groups?
4. Is there a significant difference in the students' performance in Reading Comprehension Test before and after the explicit teaching of Metacognitive Strategies?
5. Is there a significant difference in the students' performance in Vocabulary Test before and after the explicit teaching of Metacognitive Strategies?
6. What are the perceptions of students who underwent the intervention program on explicit teaching of metacognitive strategies in honing their comprehension skill and vocabulary size?

LITERATURE REVIEW
Metacognitive Strategies in Education

Although metacognition has been a buzzword in education for the past several years, it seems that the meaning is often taken for granted and assumed. Flavel (1979), an American developmental psychologist coined the term "metacognition" and defined it as

knowledge about cognition and control of cognition. This means that metacognition represents the ability to learn how to learn. A classroom demonstrates a presence of metacognition when students "are involved in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991, as cited in, Eison, 2010, p. 1). It also involves the cognitive process such as memory, attention, and comprehension. They also added that using rehearsal to keep from forgetting is a metacognitive strategy on memory. However, even though metacognitive strategies are considered to be of value for developing comprehension and vocabulary skills that can lead to ample text comprehension, most classroom teachers nowadays often fail to teach this process.

Boulware-Gooden, Carreker, Thornhill and Joshi (2007) conducted a research study on 10 Fourth and Fifth Grade classrooms to investigate instructional practices inside the classrooms that most teachers employed. They found out that explicit or direct teaching of metacognitive strategies was minimal. This scenario is also similar to the local educational setting where prescribed activities from instructional materials are closely followed by language teacher without any time allotment for direct teaching of metacognitive strategies to the learners. If teachers want to produce metacognitively equipped learners who know how to attack any reading texts, there must be serious implementation to include in the present basic education curriculum or train the teachers on how to employ metacognitive strategies in every classroom.

Since it is vital for students to learn how to learn, it is also of equal importancethat
"teachers should learn how to learn how to facilitate the learning of their students" (Avila & Baetiong, 2012, p. 53). Although the main job of teachers is to provide instruction to students, it is an imperative for them to hone their skills in training their students to become self-directed learners. Avila and Baetiong (2012) noted that "language learning requires active self-direction on the part of the learners. They

cannot be spoon-fed if they desire and expect to reach an acceptable level of communicative competence" (p. 53).

According to Hake (1998), pedagogical practices that incorporated active involvement of students resulted to positive changes in their academic performances. Similarly, students who were taught with (1) various classroom activities, (2) cooperative and group works, (3) improved class assessments, and (4) interactive group discourses had higher gains in learning than those who were taught with traditional teacher-lectures (Knight and Wood, 2005, as cited in, Eison 2010, p. 2). The findings from these studies amalgamated what Chickering and Gamson (1987) mentioned:

Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to experiences, apply it to their daily lives. They must make what they learn part of themselves (as cited in Eison, 2010, p. 2).

Implicit and Explicit Teaching of Metacognition

In 1998, Pressley, Wharton-McDonald, Mistretta-Hampston and Echevarria conducted a research study on the use of explicit teaching of metacognitive strategies in the classroom. They found out that the intervention group improved significantly over the control group in their reading comprehension skills and vocabulary size. This means that direct or explicit teaching of metacognitive strategies can be of great help to the learners.

Comprehending or understanding a reading text involves one's utilization of vocabulary skill. Since comprehension is the reason for reading and vocabulary plays a significant role, it is important that every teacher be equipped with the best instructions that can promote the development and enhancement of one's vocabulary knowledge for him/her to be considered competent of the English language. This is supported by Richards (2008) who stated that "one of the simple facts of life in the present time is that the English language skills of a good

proportion of citizenry are seen as vital if a country is to participate actively in the global economy and to have access to the information and knowledge that provide the basis for both social and economic development" (p. 158).

It is equally important to learn vocabulary in a direct way. According to Hubbard (1986), direct instruction helps students learn difficult words, such as words that represent complex concepts that are not part of students' word-learning strategies. These vocabulary strategies came out of different perspectives and theories on how a person enhances his/her vocabulary skill. When the theories behind vocabulary learning grow, the strategies also increase. One of the biggest factors that have contributed to the failures of students to pass in the standardized or commercial tests is the limited vocabulary size. This phenomenon is also blamed for the poor communicative skills of students in the classroom or even adults applying for a job. Nation (2001) pointed out that about 2,000 high frequency words should be mastered by second language learners to communicate effectively and another 8000 words above for academic vocabulary. These words can be learned through self-initiative of every learner (i.e. love of reading various text genres) or by way of formal instructions in school. Decarrico (2001), discusses that there are two effective vocabulary learning strategies: *explicit* and *implicit* learning. Explicit learning, which is the traditional strategy, focuses on the student's attention to vocabulary items. They also learn vocabulary directly when they are explicitly taught both individual words and word-learning strategies (Teale and Yokota 2000).

On the other hand, implicit learning occurs when the mind is focused elsewhere or on the other stimulus. Again, Teale and Yokota (2000) stated that students learn vocabulary indirectly when they hear and see words used in many different contexts- for example, through conversation with adults, through being read to, and through reading extensively on their own. Although, both kinds of strategies aid to the enhancement of student's vocabulary knowledge, the big weigh of learning remains the frontier of explicit teaching of vocabulary

strategies. In addition, direct or explicit instruction helps students learn difficult words, such as words that represent complex concepts that are not part of student's everyday experiences (Teale & Yokota, 2000). It also aids in gaining better reading comprehension. Moreover, direct instruction of vocabulary includes providing students with specific word instruction and teaching them word learning strategies.

In the Philippines, a number of studies have examined the importance of metacognitive strategies and reading comprehension skills of students. Batang (2015) investigated the relationship between the awareness on metacognitive strategies and reading comprehension levels of Filipino pre-service secondary teachers. He found out that there was a significant relationship between Metacognitive strategies and reading comprehension level among the students. The author recommended that teachers should put high importance on the teaching of metacognitive strategies to improve students' reading skills. Drawing on his findings on the bilingual readers' metacognitive strategies and reading comprehension, Estacio (2013) suggested that teachers consider explicit teaching of the various metacognitive reading strategies with emphasis on the "how", "when", and "why" of these strategies so students can adapt them when reading various texts. This study was carried out by the author among third year high school students. This thread of findings was also examined in 2001 by Reyes who discovered that the employment of metacognitive strategies had a significant and positive effect on the reading performance of the six grade students in all three schools in the Philippines. These studies provide clear evidence that metacognitive strategies are integral in the development of students' reading skills and teaching these strategies to students is indispensable. However, it should be noted that these studies have explored quite different contexts of Filipino learners (i.e., elementary, high school, and college). There is hardly ever study, if any that looks into the explicit teaching of metacognitive strategies in enhancing students' reading comprehension and vocabulary skills in the context of senior secondary school. Since the K to 12 curriculumis relatively new in the Philippines and senior secondary school is

considered as a young stage in the Basic Education, this study is put forward to shed light on the viability of explicit teaching of metacognitive strategies in improving senior secondary students' reading comprehension and vocabulary skills.

METHOD

This study primarily employed a quasi-experimental research design since the main goal is to measure the comprehension skills and vocabulary size of students before and after an intervention. This design as a research method, just like a true experimental research, purports to test causal hypotheses (White & Sabarwal, 2014). The difference between true experiment from a quasi-experimental study is that "the investigator uses control and experimental groups but does not randomly assign participants to groups (e.g., they may be intact groups available to the researcher)" (Creswell, 2009, p. 219). This means that a quasi-experimental design can be an effective tool to use if the goal of the research is to test whether an intervention causes some changes in the behavior or performance of the experimental groups. Hence, it was very helpful to determine if the use of the explicit teaching of metacognitive strategies programs yielded significant difference on the comprehension and vocabulary size of the respondents.

The study also used a descriptive quantitative method to describe and analyze the feedbacks that were gathered from the metacognitive strategies self-assessment survey of the participants which was administered after the intervention. The responses that were gathered from the students provided essential information on how the approach affected the participants' skills in comprehension and vocabulary.

The researchers made use of the purposive sampling technique in selecting the sample. The use of purposive sampling in this research was on the basis of the research goal. As defined by Dörnyei (2007), convenience sampling is a type of non-probability sampling wherein sample from the members of the target population are chosen for the

purpose of the study when certain practical criteria such as geographical nearness, availability at a certain time, accessibility or the willingness to participate is met. In addition, Dörnyei elucidates that, "captive audiences such as students in the researchers' own institution are prime examples of convenience sampling." Selected senior secondary students, Grade 11 ABM from sections A with ages ranging from 16-18 years old were asked to be the respondents of the study. These students were all enrolled in *Reading and Writing* class first semester of school year 2018-2019 during the conduct of the study. Furthermore, the students came from a Chinese-Filipino Catholic school were one of the researchers teaches on a part-time basis. Hence, the respondents are his students. The section involved in the study was composed of 40 students and was then divided evenly into two groups through random sampling. Half of them or the 20 students underwent the intervention program and were almost identical with the 20 students in the independent group in terms of age, academic track, and academic grades as well as economic status.

Specifically, this study utilized a paper-and-pen test in determining both the comprehension and vocabulary skills of the respondents. Two 50-item tests were developed by the researchers for the purpose of the study. The first multiple-choice test was administered to test the students' reading comprehension skills whereas the other was to determine their vocabulary skills. Both test instruments underwent validation by 3 experts in the field of languages and measurement. During the validation process, some items were removed while others were improved to make sure that the tests obtain utmost validity. For the reading comprehension test, initial number of items was 30 and 5 items were removed due to validity reasons while one was improved and retained making the final reading comprehension multiple-choice test 25 items. On the other hand, the original number of items for vocabulary test was 25 and after the validation, all items were retained but with some improvements to suit the level of the respondents.

Before the start of the program, the students were oriented by their teacher regarding the intervention and the overall purpose of the study. Since the teacher handles only one section of grade 11 students enrolled in "Reading and Writing," the students in the class automatically became the participants. Half of the class or 20 students underwent the intervention program while the other 20 respondents were considered as the control group. The program was carried out through a four-session training of the explicit teaching of metacognitive strategies. The program was conducted in an off-session scheme with 1-hour time allotment in each session. For the first two sessions, instructions on metacognitive strategies were discussed explicitly. This was followed by an activity which the skills in metacognitive strategies learned were applied. Reinforcement activities were also given until the respondents became confident enough in using the metacognitive strategies to improve their comprehensions.

For the third and last sessions, a continuation of direct teaching of metacognitive strategies that focused on how to unlock words without using a dictionary was conducted. Respondents in the experimental group were informed on their scores in the vocabulary pre-test to challenge them to improve their vocabulary size. This was followed by the explicit teaching of metacognitive strategies on how to improve one's vocabulary. The sessions included the teaching of using context clues, word formation and inflections, and semantic webbing. After the short direct instruction of each strategy for vocabulary development, the experimental group participants were trained or given sample activities which required the use the metacognitive strategies that were taught to them. For the post-test administration, the experimental and control group took the test simultaneously with the same kind of test used from the pre-test.

The different data from the comprehension and vocabulary tests were analyzed and interpreted accordingly. Mean scores of the different tests from the control and experimental group were obtained using the t-Test of Equal Variance. These were composed of the test

results from the pre-test and the results from the post–test. The standard deviation from the two sets of tests was also obtained using the t-test. The increase of performance by the experimental group and control group in both Vocabulary and Comprehension Tests was illustrated using bar graphs. To show the perceptions of experimental group towards the intervention, percentage using pie graph was used. In addition, descriptive statistics was used to analyze data from survey regarding the assessment of the intervention program.

FINDINGS

This section shows the different results gathered before and after the intervention program. These come from the pre-test results of comprehension skills and vocabulary size, as well as the post test results of the same type of test conducted after the explicit teaching of metacognitive strategies to the experimental group. The following tables show the results of the different tests.

The performance of Control and Experimental Groups in the Reading Comprehension and Vocabulary Test

The first research question that this study ought to answer is concerning the performance of the students both in the control group and in the experimental group before and after the intervention program. In order to show efficacy of the intervention, students' pre- and post-test scores on vocabulary and reading comprehension test are presented below to show the difference of performance between the two group of respondents as indicated by the Mean Difference.

For the reading comprehension test, the posttest mean of the control group increases only by 3.05 over the pretest scores. On the other hand, the post-test mean scores of the experimental group increases by 10.45 over the pretest.

Table 1 Test results of control and experimental group in reading comprehension and vocabulary test

	Experimental Group	Control Group	Mean Difference

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Reading Comprehension		Mean	Mean	
	Pre-test	11.65	10.35	1.3
	Post-test	22.10	13.40	8.7
Mean		10.45	3.05	
Vocabulary	Pre-test	11.05	11.15	-0.1
	Post-test	21.35	17.90	3.45
	Mean	10.30	6.80	

There is also a difference of the scores in the vocabulary test. For the control group, the pre-test mean increases by 6.80 in the posttest whereas for the experimental group, the increase from the pretest mean is 10.30 after the direct instruction of metacognitive strategies to the group. It also shows that the difference of mean for the vocabulary test between the two group is 4.50. Although the finding shows improvement of scores between two groups, the increase of scores of students from the experimental group is remarkable.

The Increase of Reading Comprehension Performance of Control and Experimental Group

Research question number 2 specifically investigates the increase of performance in the reading comprehension test of the control and the experimental group. As can be gleaned from Figure 1 below, there is indeed a huge increase in the scores of the experimental group in the reading comprehension test. The group increased their performance in reading by 51% compared to the performance of the control group with only 15% increase.Prior to the intervention program, both groups almost have identical mean scores in the pre-test.However, the experimental group manifested huge increase in their post-test performance due to the direct teaching of metacognitive strategies that they underwent.
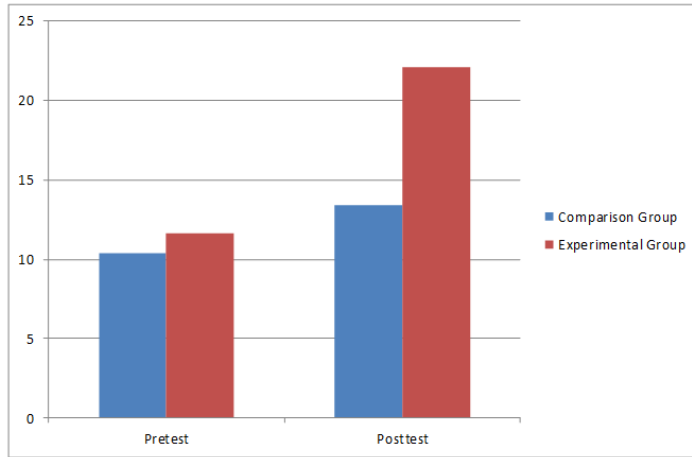
Figure 1 The development of Reading Comprehension Performance of Control and Experimental Group

The Increase of Vocabulary Size of Control and Experimental Groups

In connection to the reading comprehension test, the increase of students' performance in the vocabulary test scores is also presented.
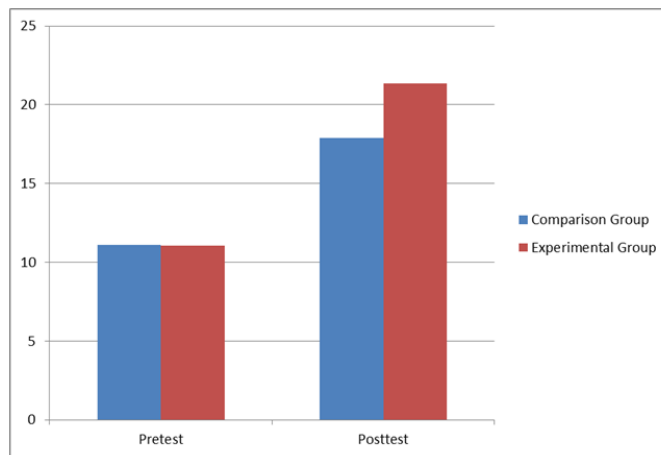

Figure 2 Increase of Performance in Vocabulary Test of the Control and Experimental Group

As shown in Figure 2, the vocabulary sizes of both groups increased exponentially in the posttest. Control group increases its mean by 6.80 or from 11.1 to 17.9 in the posttest. On the other hand, the

experimental group increases its mean by 10.30 in the posttest.Although there is only a slight difference of 3.50 mean gain between the two groups, experimental group's increased is relatively higher by 50% in its pretest performance. The graphic representation also shows the identical performance of both groups in the vocabulary pretest but with unparalleled result in the posttest.

Differences in Students' Reading Comprehension Performance before and after the Explicit Teaching of Metacognitive Strategies

As to the significant difference in the students' performance in the reading test before and after the explicit teaching of metacognitive strategies, table 2 indicated that there is a significant difference in the participants' scores.

Table 2 Test of difference between pretest- posttest mean of the experimental group in reading comprehension

	Mean	SD	Computed t-value	Tabular t-value	Decision	Interpretation
Pretest	13.50	1.685	5.365	2.682	Reject Ho	Significant
Posttest	22.10	2.024				

As illustrated above, the group has a mean score of 13.50 in the pre-test and a 22.10 mean score in the posttest.At 0.05 level of significance and 28 degrees of freedom the computed t-value was 5.365 which was higher than the tabular t-value of 2.682. This means that there was significant gain in the pretest-posttest mean scores of the experimental group after the explicit teaching of metacognitive strategies.

Differences in Students' Vocabulary Size before and after the Explicit Teaching of Metacognitive Strategies

The significant difference in the experimental group's performance in the vocabulary test before and after the intervention is noted in table 3.

Table 3 Test of difference between pretest- posttest mean scores of the experimental group in vocabulary test

	Mean	SD	Computed t-value	Tabular t-value	Decision	Interpretation
Pretest	11.05	1.68			Reject Ho	
Posttest	21.35	2.02	9.445	4.722		Significant

Notably**,** the group has a mean score of 11.05 in the pre-test and a 21.35 mean score in the post-test. At 0.05 level of significance and 28 degrees of freedom, the computed t-value was 9.445 which is higher than the tabular t-value of 4.772. This means that there is a significant gain in the pre-test-post-test scores of the experimental group after the explicit teaching of metacognitive strategies.

Students' Perceptions on Explicit Teaching of Metacognitive Strategies for Honing their Reading Comprehension Skill and Vocabulary Size

Results of the Self –Assessment Survey sheet from the experimental group reflect the affirmative response of the students on the conduction of the intervention program (see Figure 3 below).It shows that 80% of the respondents from the group strongly agreed that the program has helped them tremendously improving their comprehension and vocabulary skills. In addition, graphic representation above also shows that the remaining 20% of the respondents from the group also agreed that the program helped them enhance their comprehension and vocabulary. Representation above also shows 0% do not agree the intervention which means no one perceived the program as a worthless endeavor.
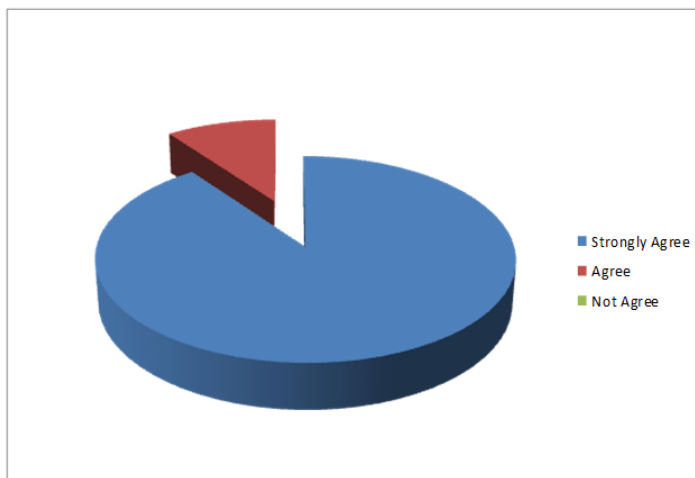
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Figure 3 Results of the self-assessment survey sheet of the experimental group

DISCUSSION

This study found that the explicit teaching of metacognitive strategies significantly improved the comprehension skills and vocabulary size of the of the selected senior secondary students who served as the respondents in the intervention group. Although both groups increased their performance in the posttest, still there was a wide gap in the comprehension skills of 34% in terms of difference between the experimental and comparative group. It can be said that students in the grade 11 age brackets can still improve their comprehension skills and vocabulary size if given enough training on how to use metacognitive strategies. Thisfinding provides further evidence to support the effectiveness of direct or explicit teaching of metacognitive strategies. Specifically, respondents in the experimental group whose vocabulary instructions included in the metacognitive strategies requiring generating synonyms, antonyms, semantic webbing, contextual clues, and other related vocabulary skills development saw greater increase on vocabulary measure or size of 50% than students who did not undergo explicit instructions of metacognitive strategies. The use of vocabulary webs or semantic

webbing created a more visual representation of the word's meaning and conceptual understanding (Beck & McKeown, 1991) over the traditional use of memorizing a word's definition and using it in a sentence. Direct and explicit teaching of metacognitive strategies help the students underscore the meaning of difficult words without the aid of a dictionary and facilitate in retaining in their minds the words learned by transforming the difficult words into semantic webbing. This result also supports the finding of Rasekh and Ranjbary (2003) who found among 53 Iranian EFL students that explicit metacognitive strategy training significantly improved students' vocabulary learning.

On the other hand, comprehension enhancements were also found to be greater in the experimental group (51%) compared to the control group (15%) increase. This seems to be the results of the explicit instructions of metacognitive strategies that were used in the experimental group. For instance, in the post-test session, both groups read the same expository texts, answered many of the same questions, and were engaged in the same introductory activities. However, the experimental group used almost all the metacognitive strategies they learned in the explicit instructions of metacognitive strategies which include summarizing, getting the main idea, making inference, noting details, analysis, self -questioning and evaluating one's own progress and learning. This finding corroborates to some of the previous studies (Wharton-McDonald, Mistretta-Hampston and Echevarria, 1998; Cubukcu, 2008; Erskine, 2010) which affirm that using metacognitive strategies can help students improve their reading comprehension skills. Moreover, Boulware-Gooden, Carreker, Thornhill and Joshi (2007) shared the same findings in their study on Grade 5 students from different schools in the United States. They found out that students who were explicitly taught to use metacognitive strategies flared in their academic and reading comprehension performance. Their studies also showed that vocabulary size of the students who were used in the intervention program increased compared to those who did not undergo the same training. Hence, the outcomes of this paper shed light to its purpose. The findings of this study also advance the idea

that metacognitiveknowledge is an essential component of learning which should be integrated in learner training programs to make students' learning more successful (Wenden, 1998).

Interestingly, the study also indicated that respondents expressed positive attitude toward the intervention program based on the Self- Assessment activity conducted after the program. Majority of the respondents in the experimental group agreed that the program has helped them to a certain extent in enhancing their reading comprehension skills and in improving their vocabulary sizes. Since the study involved a limited number of respondents who were only grade 11 students, it may be more effective if the study will be conducted in a larger number of respondents including grade 12 to realize if this is really effective to be applied in the context of the entire school context which in this case is senior secondary school.

CONCLUSION

Based on the findings of this study, the following were concluded: (1) there was a significant effect on comprehension skills and vocabulary size in the experimental group who undergo explicit teaching of metacognitive strategies compared to the group who did not experience the intervention; (2) students in the experimental group expressed affirmation on the use of metacognitive strategies which majority of them believed that the intervention helped them in many ways; and (3) there was a significant difference in reading performance as well as vocabulary size between the experimental group who undergo the metacognitive strategies training compared to the performance of the control group.

The intensity of the study and the systematic explicit instruction of metacognitive strategies led to the positive effects for understanding written text, which is the reason for reading. Vocabulary sizes of the students were also enhanced after the intervention program. Given this vantage point, the researchers strongly recommend the following. First, there should be a special training for all language teachers on how to teach metacognitive strategies to their students so that students can

adapt the skills and become independent readers. Second, metacognitive strategies should be taught in the learning package in all grade levels and enough time should be allotted for the strategies to be taught explicitly. Third, teachers may modify and enhance the list of metacognitive strategies for more comprehensive instructions. Last, for future researchers, similar study can be carried out taking a wider scale of respondents for a more encompassing result. Since the present study attempts to document the importance of explicit teaching of metacognitive strategies in the context of senior secondary school, a research that includes various sections of grade 11 as well as grade 12 students may yield a more generalizable result.Considering samples from public senior secondary schools may also prove to be more beneficial as students from such schools are more diverse and may possess different characteristics which are worth investigating inasmuch as using metacognitive strategies in reading is most concerned. Finally, since the present study only used quasi-experimental design, future researchers may venture on a true experimental study where group assignment is made on a random basis.

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