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Cooperative Learning Strategy: Its Effects on Enhancing the Vocabulary and Reading Compression Skills of MSU-ILS Grade Six Pupils

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ABSTRACT

The research conducted was quasi-experimental in nature. It was undertaken in order to determine the effects of cooperative learning strategy in enhancing the vocabulary and reading comprehension skills among the Grade Six pupils of MSU-ILS, A.Y. 2011-2012. Specifically, it sought to find out the profile of the respondents in terms of age, gender, parents' occupation, and parents' monthly income; the significant difference between the pretest and the posttest mean scores of the control group in vocabulary and reading comprehension skills; the significant difference between the pretest and the posttest mean scores of the experimental group in vocabulary and reading comprehension skills; and the significant difference between the mean gain scores of the respondents of both groups in vocabulary and reading comprehension skills. This research involved seventy-five (75) Grade Six pupils of Mindanao State University-Integrated Laboratory School (MSU-ILS). One group consisting of 37 pupils was identified as the experimental group. This study was analyzed by the SPSS (Statistical Program for Social Sciences) The data were treated using one-way ANOVA (Analysis of Variance). The study revealed the following findings: 1) majority of the respondents were aged 13 years old; 2) majority of the respondents are females and few of them are males for both the experimental and the control groups. 3) majority of the parents of the respondents were employees or faculty members; and 4) most of the parents of the respondents were receiving an average level of income (10001-20000). Moreover, the study has a significant difference between the pretest and the posttest mean scores of the experimental group in vocabulary and reading comprehension skills. Statistically, there is also a significant difference between the pretest and posttest mean scores of the control group in vocabulary and reading comprehension skills. Finally, the two groups have the same variance. It means that on the average, the mean gain scores of pupils in both the control and experimental groups are the same. Based on the findings, cooperative learning strategy is effective in teaching vocabulary and reading comprehension skills to the learners, traditional learning strategy is also effective in teaching vocabulary and reading comprehension skills to the learners or effective learning, whichever teaching strategy is used by the teacher the learners need to be participative in high order thinking exercises, such as analysis, synthesis, and evaluation and the cooperative learning strategy and traditional strategy are both effective. There is no single "best" learning strategy to teach vocabulary and comprehension skills to learners and whatever learning strategy is used in the classroom, there is a need to take into account the learners' current knowledge so that they can work within their zone of proximal development and thus progress will be implied in this study.

1. Introduction

The use of cooperative learning in the classroom goes back to the 1970s, when Israel and the United States started creating and evaluating cooperative learning models for use in the classroom (Kessler, 1992). Cooperative learning is still used in almost all school subject areas and, increasingly, in college and university contexts around the world (Johnson & Johnson, 1989;

(Kessler, 1992), and is claimed to be an effective teaching method in language education by scholars both abroad (Johnson, 1990) and throughout the country (Johnson, 1990); (Cheng, 2000); (Chern, 2002), (Chern, 2002).

According to Cheng (2000), however, certain training methods and materials are appropriate for those pupils with various teaching attitudes. For example, students with a higher standard of English may be uninterested in the materials because they believe the learning exercises are too simple or even repetitive. In contrast, students who are low reach or less motivated and are anxious in the classroom can find the learning activities too difficult and exhausting. Teachers must also seek ways of teaching that create a suitable atmosphere and create a positive approach to learning.

Teaching is also considered an artistic achievement. While performance comparisons were originally meant to underline teachers' creativity, they are now synonymous with contemporary reform attempts towards scripted education that reject teachers' creativity (Sawyer, 2004). The metaphor of "teaching success" allows teachers to see themselves as performers on the stage and play for their students (Lessinger, 1976); (Timpson, 1982). This metaphor stresses critical instructor skills such as lecture, performance, speech, action and schedule. Yet the performance metaphor is controversial, as it assumes that a soloist should read from a script with students as a silent, observer audience—the metaphor of success limits instruction to a personalized emphasis on the instructor.

According to Knight (2006), creative teaching is employing methods that will arouse learners' desire to learn. Once the learner experiences small success in learning, he will eventually learn to love learning. One of the goals of educators is to produce transformed lives in the learners. This can start with igniting interest in one learner at a time and eventually influencing others to be lovers of learning as well.

As a result, the cooperative learning approach is an innovative teaching strategy. Cooperative learning improves the success of students and enhances their enjoyment of English in primary and secondary education. Cooperative learning is defined as a classroom approach with a range of activities that enable students to work together towards a shared purpose. Cooperative learning is practised throughout the human experience and an educational culture element. Its efficacy is recorded in various research studies (Johnson, 1990); (Kagan, 1986); (Slavin, 1988).

Moreover, according to Brown (1992), teachers who use cooperative learning successfully know that its success depends on the careful structuring of learning experiences. This structure does not permit groups of children to interact with materials in unplanned ways and for undefined purposes.

Since the researcher tried to investigate the results of cooperative learning strategy in enhancing vocabulary and reading comprehension skills, she tried to adopt other opinions from other studies regarding the issues and problems on the enhancement of vocabulary and reading comprehension skills.

From the study of Palsan (1999), grade five pupils are classified as slow readers. Some cannot even decode, much more read with comprehension because elementary experience offers challenging intellectual development opportunities. Further, they mentioned that in order for the pupils to be successful, they should be willing to do away with other interests and recognize the need for reading opportunities along with the acquisition of good study habits.

In addition, in her research, Alamanza (1997) listed other read-related issues. She said that even students who are proficient readers refused to read the teacher's given subject area texts. Many students take reading as a matter of course. Learning reading in the elementary years is one of the most critical things children have to do. Reading is the basis for all university activities. From the middle primary years into the remainder of their lives, kids spend a great deal of time reading and studying in texts (Slavin, 1988).

Meanwhile, similar reading problems were discovered in MSU-ILS. Dimaporo (2001) found out in her study that the teachers perceived the following; (a) lack of interest among pupils; (b) lack of cooperation among pupils; (c) lack of interest in teaching reading; (d) lack of expertise, knowledge and understanding of latest trends in reading; (e) pupils' difficulties in understanding some concepts; (f) and lack of knowledge on how to use various reading techniques.

Putting all the ideas presented in the above findings, the researcher conducted an investigative study that looked into the use of cooperative learning strategy in improving the vocabulary and reading comprehension skills of Grade Six pupils in MSU –

Integrated Laboratory School. The researcher believed that pupils should be encouraged to take an active role in their learning process, especially in developing their vocabulary and reading comprehension skills. Likewise, teachers should play an important role in preparing their pupils for further learning tasks. Therefore, this study sought to discover whether a cooperative learning strategy could better serve elementary teachers teaching English - Reading and thus bring greater progress than the traditional teaching strategy. The researcher hoped that this study's results would benefit teachers in their English – Reading teaching and would provide models for future instruction. This study is anchored on the Motivational theory, Schema theory, Cognitive theory, Cognitive-Developmental theory, Interactive theory, Social-interaction theory, Social-interdependent theory, and the Affective filter hypothesis.

The Motivational Theory

Motivational views on cooperative learning depend more on students' incentive or objectives. Slavin (1988) and Deutsch (1949) defined three target structures: cooperative in which the goals-oriented efforts of each individual lead to achieving other objectives; competitive in which the aim-oriented efforts of each individual deter others from achieving their goals; and individual in which the aim-oriented efforts of each individual have little relation with the goals of other goals. From a motivational aspect such as those of Johnson (1990) and Slavin (1988), cooperative goal structures create an event in which the group members can achieve their own personal goals if the group is successful.

The Schema Theory

The schema theory of reading corresponds to the cognitive view of reading. In addition to the relevance of lexical access automaticity, research into human memory has a pedagogical effect on vocabulary training. The universe's history has been postulated to be encoded in "scripts" or schemes of events in human memory (Rumelhart, 1980). For example, in a schematic network of interrelated activities, awareness of what is happening at an ordinary Meranao cultural event has been held in the human mind.

The schema theory assumes that people want to fit the information into a system of memory that lets them make sense of the knowledge as they get knowledge. It also claims that people split information into generalized pieces, which are then processed for later recollection categorically in the brain. Schema theory is an aggressive coding method for strategies that is important to facilitate information recall. When new information is interpreted, it is coded or arranged into a new script (Rumelhart, 1980).

The Cognitive Theory

The cognitive theory of growth was focused largely on the Piaget, Vygotsky and cognitive sciences theories (Johnson, 1990). Piaget's theories were broadly understood as promoting the development of a classroom where students play an active role in actual or practical activities (Slavin, 1988).

The use of cooperative activity in schools was requested by several Piagets (Damon, 1984); (Muray, 1982); (Wadsworth, 1984). Students benefit from each other when cognitive conflicts occur in their text discussion (Slavin, 1988). Piaget assumed that when people cooperate, problems happen. Such conflicts generate brain imbalances and promote cognitive performance in response (Ellis, 1993).

The Cognitive-Developmental Theory

Vygotsky (1978) and Slavin (1988) argue that intelligence is social, built on cooperation attempts to read, understand, and solve problems. Vygotsky saw learning and growth in social and cultural settings as complex processes. He thought that "learners are interpersonal actors of communicative, social interactions, and the true course of thinking growth is not the self, social and the individual" (Vygotsky, 1978). He also said that students should communicate with a more knowledgeable person than themselves to go beyond their current growth. Teachers should provide feedback and resources for learners to collaborate alongside more competent peers from this statement. Students cannot flourish intellectually without cooperative activities to provide such a learning atmosphere.

According to Vygotsky (1978), when the development of skills is advanced, all successful learning takes place through engagement within the area of student development beyond the reach of the pupil. Vygotsky describes the proximal growth zone as the disparity between the actual production level (i.e. independent performance) and its future level (achievement with help from a more competent partner).

For the educational community, Vygotsky's area of proximal growth has several consequences. One was the belief that human learning presupposed a certain social orientation and was part of a mechanism through which children became part of their academic existence (Vygotsky, 1978). Vygotsky (1978) states that an essential element of learning is that the infant has been in contact with adults in his community and collaborates with his peers to create a set of internal development mechanisms that can only be implemented as they work (Chern, http://www.Thesis_Liang_Tsailing, 2002).

From the perspective of cognitive science, cognitive psychology research has found that if the information is to be retained in memory, the learner must engage in the elaboration of the material. The learner must cognitively rehearse and restructure information for it to be retained in memory and incorporated into existing cognitive structures (Webb, 1989). Therefore, an effective way of restoring information is to explain the learning materials to the other students. Students receiving elaborated explanations learn more than those who worked alone. Therefore, mentally rehearsing and then presenting information to others enhance one's own retention of the content (Rizan, 2000). Thus, cooperative learning incorporates cognitive science to increase students' interaction and develop their thinking skills (Johnson, 1990). So dialogues among students help them explore and clarify difficult concepts. Moreover, learning is often achieved most in conversations.

The Interactive Theory

Another theory that has a bearing on this research is Stanovich's interactive theory (1981). Most foreign language reading specialists view reading as interactive. The interactive model stresses both the written page and the interaction. The interactive model stresses both what is on the written page and what a reader brings to it using both top-down theories while minimizing their weaknesses.

The reader interacts with the text to create meaning as the reader's mental processes work together at different levels (Rumelhart, 1980). The level of reading comprehension of the text is determined by how well the reader variables (interest level in the text, purpose for reading the text, knowledge of the topic, foreign language abilities, awareness of the reading process, and level of willingness to take risks) interact with the next variables (text type, structure, syntax, and vocabulary).

One important part of interactive process theory emphasizes "schemata", the reader's pre-existing concepts about the world and about the text to be read. Into this framework, the reader fits what he or she finds in any passage of new material, ignores the new material, or revises the schemata to match the facts within the passage.

Cognizant of this, Rumelhart (1980) viewed reading as an interactive process in which readers vary their focus along a continuum from primarily text-based processing to primarily reader-based processing. Based on this, the processing of text is a flexible interaction of all the different information sources available to the reader, and the information contained in higher stages of processing can influence the analysis that occurs at lower stages of analysis and the other way around. Readers can process print by using one or more possible information sources as their primary clues to access meaning: semantic context, syntactic environment or surrounding letters.

The Social – Interaction Theory

Long (1985) and Ellis (1993), among other interactionists, also believe in the importance of comprehensive input. His interaction hypothesis also stresses the importance of comprehensible input as a major factor in second language acquisition; however, he also believes that interactive input is more important than non-interactive input. In addition, Long (1985) stresses the significance of interactional modifications which occur in the negotiating meaning when communication problems arise (Ellis, 1993). The major distinction between interactionist and nativist theories of SLA is that scholars such as Krashen and some of his contemporaries emphasize comprehensible target language input which is one-way input and, on the contrary, interactionists acknowledge the importance of two-way communication in the target language (Ariza E. N., 2003)Interactionists agree that Krashen's comprehensible input is a crucial element in the language acquisition process, but their emphasis is on how input is made comprehensible (Spada, 1998).

In other words, interactional adjustments make input comprehensible, and comprehensible input promotes the acquisition; thus, interactional adjustments promote acquisition (Spada, 1998). Long believes that when meaning is negotiated, input comprehensibility is usually increased and learners tend to focus on salient linguistic features (Ariza, 2003). Long's interaction hypothesis is summarized as follows:

Speakers in conversations negotiate meaning. In the case of conversations between learners and others, this negotiation will lead to the provision of either direct or indirect forms of feedback, including correction, comprehension checks, clarification requests, topic shifts, repetitions, and recasts. This feedback draws the learner's attention to mismatches between the input and the learner's output (Johnson, 1990).
Social interaction, particularly peer interaction, is a valuable part of classroom learning (Vygotsky, 1978). In fact, it asserts that social interaction is essential for the development of cognition, learning, and knowledge. In the United States and abroad, cooperative learning has been proven to be one of the best ways to promote successful interaction in classrooms (Johnson, 1990).

Cooperative learning can easily be implemented in the classroom. The main objective of cooperative learning is to help students understand the values of working together for the purpose of learning (Cheng, 2000). It is not a new strategy. Dewey (1916) advocated at the end of the 19th century that pupils work in committees to solve problems.

The Social Interdependence Theory
Social Interdependence Theory's central notions that "social interdependence exists when individuals share common goals and each individual's outcomes are affected by the actions of others" (Johnson, 1990). Social interdependence can be differentiated from social dependence and social independence. Social interdependence occurs when each person's gains and losses influence other individuals' gains or losses. From this viewpoint, learning takes place through social interaction and communication.

In the 1970s, Aronson and his colleagues apply Jigsaw, the well-known cooperative learning technique. Each group member has unique information that they must share with their teammates to achieve their common goal. Jigsaw II, has been used in second language teaching using print (Johnson, 1990); and spoken texts (Damon, 1984). Moreover, the concept of offering each particular group information that must be elaborated has been popular in second language teaching.

Moreover, teachers could ask well-prepared students to integrate into the cooperative group task the advanced ideas they have worked on. As a result, all group members gain more complex understandings. Imagine a cooperatively structured social studies project for which difficult primary source material is available. One student in each group tackles this demanding material and then presents it to other group members. The whole group benefits from ideas they otherwise wouldn't have access to, and the advanced learner is approximately challenged (Schniedewind N. and Davidson, 2000)

In addition to this theory, the linguist Noam Chomsky proposed his theory as a reaction to what he saw as the inadequacy of the behaviorist theory of learning based on imitation and habit formation. Chomsky in 1965 had discovered the existence of some kind of special language processing ability that children were born with, known as "language acquisition device (LAD)" (Hadley, 2001). The LAD in children is responsible for their success in language learning. Chomsky claims that children are biologically programmed to learn language and language develops in children in a similar way that other biological functions develop (Spada, 1998).

Chomsky argued that this innate ability enables the children to create a linguistic system quickly, even with limited input. The children's language experience with language input would probably have an effect on language learning but the language universals in the children's mind are the product of their LAD. This belief results in Chomsky's Universal Grammar Theory that acknowledges the existence of a set of basic grammatical elements, available in all human languages that helps children to organize the input in certain ways (Hadley, 2001).

2. Conceptual Framework
This page is the conceptual framework of the study. It presents the activities engaged in by the two groups involved in the experiment, namely, the Experimental Group exposed to Cooperative Learning Strategy and the Control Group who were taught using the traditional strategy (basal reading, discussion, memorization of vocabulary, and lecture). They were both given the pre-test and post-test of Gates Basic Reading Tests.

Finally, the dependent variable was identifying the effects of the cooperative learning strategy on the vocabulary and reading comprehension skills of the learners based on the result of the pre-test and post-test given to them.

This study aimed to find out the effect of cooperative learning strategy in enhancing the vocabulary and reading comprehension skills of Grade Six pupils in MSU – Integrated Laboratory School, in the S.Y. 2011 -2012.

More specifically, it sought to answer the following questions:
1. What is the profile of the respondents in terms of the following?
 a. Age;
 b. Gender;
 c. Parents' occupation; and
 d. Parents' monthly income?
2. Is there any significant difference between the pretest and the posttest mean scores of the control group in vocabulary and reading comprehension skills?
3. Is there any significant difference between the pretest and the posttest mean scores of the experimental group in vocabulary and reading comprehension skills?
4. Is there any significant difference between the mean gain scores of the respondents in the control and experimental groups?

Null Hypotheses
The following null hypotheses were tested on a probability estimate set at 0.05 level of significance:
Ho1: There is no significant difference between the pretest and the posttest mean scores of the control group in vocabulary and reading comprehension skills.
Ho2: There is no significant difference between the pretest and the posttest mean scores of the experimental group in vocabulary and reading comprehension skills.
Ho3: There is no significant difference in the mean gain scores of the respondents in the control and the experimental groups.

3. Related Literature
Cooperative Learning Strategy
There are a few definitions on cooperative learning made by eminent scholars. Slavin (1988) describes cooperative learning as students working in small groups and are given rewards and recognition based on the group's performance. Artzi (1990) defines cooperative learning as a small group of learners who work as a team to solve a problem, complete a task or achieve a common goal. A definition of cooperative learning as a category under collaborative learning is given by Goodsell (1992). They define cooperative learning as a learning approach that falls in the more general category of collaborative learning, described as students in groups of two or more, working together mutually to find an understanding, solutions, or meaning and create a product.

Cooperative learning is a learning approach which has been proven to culminate positive results and outcome (Rizan, 2000). This approach is believed to enhance students' performance and achievement in various subjects and aspects of the language and producing positive social outcomes (Slavin, 1988). Contrary to popular belief, cooperative learning is not mere group work. In group work, sometimes the group members' participation is not equal and there are group members who indulge in a free ride without contributing to the group's work and objective. In a cooperative learning lesson, all of the team members have to assume roles to make the group task a success. The learning approach is highly structured and the teacher has to make sure that the elements of cooperative learning are evident in the lesson. This is to guarantee that each member performs their part in ensuring the success of the group's task and each member is dependent on the other to achieve the required goals.

This chapter deals with the research design, locale of the study, the samples or respondents of the study, data gathering procedure, an instrument used, data analysis methods, and the statistical tools employed in the study.

4. Research Design
This study was a field experiment using the pretest-posttest control group design. It involved two groups: the experimental group exposed to the cooperative learning strategy, while the control group was exposed to the traditional reading strategy. In this design, a pretest was administered to the participating pupils before applying the experimental treatment. A posttest was administered at the end of the experiment. Gain scores of both control and experimental groups were compared and statistically treated to determine the significant difference between their means scores.

5. Locale of the Study

The Mindanao State University (MSU), founded on September 1, 1961 through Republic Act 1387and as amended, has evolved over the years in keeping with national and local developments. The brain-child of late Senator, Domocao Alonto, MSU has grown from its main campus in Marawi City to a University System that now comprises several campuses located in major centers of Mindanao and Sulu, namely: 1) MSU Main Campus, Marawi City; 2) MSU IIT, 3) MSU General Santos; 4) MSU Maguindanao, Dinaig; 5) MSU Naawan, Naawan; 6) MSU Sulu, Jolo; 7) MSU – Tawi Tawi, 8) MSU LNCAT, Marawi; 9) MSU LNAC, Lanao del Norte; 10) MSU Maigo, and MSU - Buug. Its first president was Dr. Antonio P. Isidro, who came in from his position as the Vice President for Academic Affairs at the University of the Philippines. The incumbent MSU President is Dr. Mcapado A. Muslim.

The ILS was opened and maintained initially for practice teaching among graduating students in the College of Education. It offers complete elementary grade and high school years. Most of the enrollees are the children and dependents of MSU employees.

6. Data Analysis

This chapter presents the data and their corresponding analyses and interpretation that provide answers to the identified research problems. The results and findings of this research are based on the respondents' answers to the preliminary questionnaire and self-constructed vocabulary and reading comprehension test. Data are statistically analyzed using or Statistical Program for Social Science (SPSS).

Problem 1. What is the profile of the respondents in terms of:

1.1. Age

Table 4. Frequency and Percentage Distribution of Experimental Group by Age

Experimental	Frequency	Percent
11 years old	6	16.2
12 years old	**18**	**48.6**
13 years old	13	35.1
Total	37	100.0
Control	**Frequency**	**Percent**
11 years old	6	15.8
12 years old	14	36.8
13 years old	**16**	**42.1**
14 years old	2	5.3
Total	38	100.0

In the experimental group, nearly one-third of them (13 or 35.1%) were 12 years old. Those in the age of 13 constituted 13 or 35.1%. There were only 6 or 16.2% who belonged to the age of 11.

On the other hand, there were 16 or 42.1% who belonged to the 13 years of age in the control group. Those in the age of 12 numbered 14 constituting 36.8%. There were only 6 or 15.8% who belonged to 11 years old. Very few, 2 or 5.3%, belonged to the age of 14.

The data implied that most of the respondents are in the right age of their grade level and agile enough to learn and explore with the cooperative learning strategy in learning vocabulary and reading comprehension (Sacar, 2008).

1.2. Gender

Table 5.1: Frequency and Percentage Distribution of Experimental Group by Gender

Experimental	Frequency	Percent
Male	8	21.6
Female	**29**	**78.4**
Total	37	100.0
Control	**Frequency**	**Percent**
Male	15	39.5
Female	**23**	**60.5**
Total	38	100.0

The frequency and percentage distribution of respondents in the Grade Six of MSU-ILS according to their gender are shown in Table 5. The data shows that the majority of the two groups are females. In the experimental group, 29 female pupils comprise 78.9% and 8 male pupils comprise 21.6%. Likewise, in the control group, 23 female pupils comprise 60.5%) and 15 male pupils comprise 39.5%.

Gender is one factor that can moderately affect the respondents' reading comprehension. According to the study of Yazdanpanah (2003), the reading comprehension and reading vocabulary of individuals is greatly affected by the individual's gender. The level of familiarity of an individual with certain topics is greatly affected by the person's interest, determined by the person's gender.

This study's respondents were mostly female, with males forming a narrow minority from the male. Psychologically speaking and by normal observation, females would usually mature earlier than males, especially in verbal growth and development. This could account for their comprehending faster the things that they are actually reading (Villaruel, 2007-2008).

1.3. Parents' Occupation

Table 6. Frequency and Percentage Distribution of Experimental Group by Parents' Occupation

Experimental	Frequency	Percent
essman	7	18.9
rnment Employee	**26**	**70.3**
mployed	2	5.4
y	2	5.4
	37	100.0
Control	**Frequency**	**Percent**
essman	7	18.4
rnment Employee	**24**	**63.2**
mployed	5	13.2
y	2	5.3
	38	100.0

Table 6 shows the frequency and percentage distribution of respondents according to their parents' occupation. The data in the table shows that most of the parents' occupation of the two groups is government employees. In the experimental group,

26 or (70.3%) government employees comprise 7 or (18.9%) businessmen, and only 2 or (5.4%) were self-employed and faculty parents that is 2 or 5.4%. Likewise, in the control group, 24 or (63.2%) government employees, 7 or (18.4%) were businessmen, 5 or (13.2%) were self-employed and only 2 or 5.3% are faculty members.

Therefore, most of the respondents' parents are employees or faculty members because the school, being a laboratory school of the University, was organized by the administration to allow the parents, who are rendering services to the University, to enable their children to receive an education.

1.4. Parents' Monthly Income

Table 7. Frequency and Percentage Distribution of Experimental Group by

Experimental	Parents' Monthly Income Frequency	Percent
10000	13	35.1
l-20000	**17**	**45.9**
-30000	4	10.8
and above	3	8.1
	37	100.0
Control	**Frequency**	**Percent**
10000	12	31.6
l-20000	**15**	**39.5**
-30000	6	15.8
and above	5	13.2
	38	100.0

According to their parents ' monthly income, the frequency and percentage distribution of the experimental group is shown in Table 7. The data in the above table shows that the majority of the two groups' parents have monthly income ranging from P10,001 to 20,000. In the experimental group, their monthly income ranged from P10,001 to P 20,000-a-month; these receiving this income number 17 form 45.9%. Next, P5,000 to P10,000 a month range (13 or 35.1%). Only 4 or 10.8% earn a salary from P20,001 to P30,000-a-month. Very few of the parents have a monthly income of P30,001 and above (3 or 8.1%). Likewise, in the control group, 15 parents' income ranges from P10,001 to P20,000 a month or 39.5%. 12 parents have income range from P5,000 to P10,000 a month or 31.6%. 6 parents' income ranges from P20,001 to P30,000 a month or 15.8%. Very few of the parents have a monthly income of P30,001 and above (5 or 13.2%).

This implies that most of the respondents are children of parents with an average income level, which means that the said parents can afford to buy minimal school supplies and books for the respondents. This is why the respondents responded properly to the experiment of the researcher.

Problem 2. Is there any significant difference between the pretest and the posttest mean scores of the control group in vocabulary and reading comprehension skills?

Table 8: Paired Sample T- Test Scores of Pre and Post tests for the Control Group

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	posttest(control)	24.3947	38	5.13356	.83277
	pretest(control)	20.5000	38	3.28592	.53305

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	posttest(control) & pretest(control)	38	.953	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	posttest(control) - pretest(control)	3.89474	2.23956	.36331	3.15861	4.63086	10.720	37	.000

Ho: There is no significant difference between the pretest and posttest mean scores of the Control group in vocabulary and reading comprehension skills.

To find significant difference between the pretest and posttest mean scores of the Control group in vocabulary and reading comprehension skills, the test statistic used is the t-test dependent samples, based on the table above. The t-value is 10.720 with a *p*-value of 0.000, which is less than the 0.05 level of significance. Thus the null hypothesis (above) is rejected. It means the result is significant. Therefore, there is a significant difference between the pretest and posttest mean scores of the Control group in vocabulary and reading comprehension skills.

This result shows that the control group of students has learned under the traditional or usual teaching method employed. This method of teaching is still effective as the statistical results show a significant difference. While other factors could have affected the results, teacher and other factors are assumed constant in this study because it is focused on the method of teaching or specific teaching strategy.

Both groups showed achievement despite the different methodologies used on them. Only a few subjects showed a decrease in scores.

The teacher's traditional strategies with the control group that involved were basal reading, discussion, memorization of vocabulary, and lecture proved to be also effective as the cooperative strategy. According to Rumelhart (1980), schema theory purports that when individuals obtain knowledge, they attempt to fit that knowledge into some structure in memory that helps them make sense of the knowledge. It also purports that individual's break down information into generalizable chunks, which are then categorically stored in the brain for later recall. Schema theory is an active strategy coding technique necessary for facilitating the recall of knowledge. As new knowledge is perceived, it is coded into pre-existing schemata or organized into a new script.

This finding was also similar to the theory of Chomsky (1965) who had discovered the existence of some kind of special language processing ability that children were born with, known as "LAD". Hence, the LAD in the respondents could account for their success in language learning. This innate ability enables the respondents to create a linguistic system quickly, even with limited input.

Note: Significant means the null hypothesis is rejected at α = 0.05 level of significance or the *p*-value is less than α = 0.05.

Problem 3. Is there any significant difference between the pretest and the posttest mean scores of the experimental group in vocabulary and reading comprehension skills?

Table 9: Paired Sample T- Test Scores of Pre and Post tests for the Experimental Group

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	posttest(experimental)	25.7027	37	4.88686	.80339
	pretest(experimental)	22.2703	37	3.19417	.52512

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	posttest(experimental) & pretest(experimental)	37	.870	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	posttest(experimental) - pretest(experimental)	3.43243	2.63038	.43243	2.55542	4.30945	7.938	36	.000

Ho: There is no significant difference between the pretest and the posttest mean scores of the Experimental group in vocabulary and reading comprehension skills.

To find significant difference between the pretest and the posttest mean scores of the Experimental group in vocabulary and reading comprehension skills, the test statistic used is the t-test dependent samples, based on the table above the t-value is7.938 with a p-value of 0.000 which is less than the 0.05 level of significance. Thus, the null hypothesis (above) is rejected. It means the result is significant. Therefore, there is a significant difference between the pretest and the posttest mean scores of the Experimental group in vocabulary and reading comprehension skills.

The results of this study turned out to be similar to those of the study of Almanza (1997). It was found that when the children were in the cooperative learning groups, the majority of them scored higher on their reading comprehension tests. Furthermore, this was in line with the finding of (Johnson, 1990) who stated that Cooperative learning resulted in higher individual achievement.

In addition to this finding, (Vygotsky, 1978) stressed that all good learning wain advance of development and involved acquiring skills just beyond the student's grasp. Such learning occurred through interaction within the student's *zone of proximal development*. Vygotsky defines the *zone of proximal development* as the discrepancy between the student's actual developmental level (i.e., independent achievement) and his/her potential level (achievement with help from a more competent partner).

Problem 4. Is there any significant difference between the mean gain scores of pupils in the control and experimental groups?

Table 10: Paired Sample T- Test Scores of the main gain for the Experimental and Control group

Group Statistics

	Group(gain)	N	Mean	Std. Deviation	Std. Error Mean
data	control(gain)	37	3.9730	2.21719	.36450
	experimental(gain)	37	3.4324	2.63038	.43243

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
data	Equal variances assumed	.050	.823	.956	72	.342	.54054	.56556	-.58689	1.66797
	Equal variances not assumed			.956	69.995	.342	.54054	.56556	-.58744	1.66852

Ho: There is no significant difference in the mean gains scores of pupils between the control and experimental groups. Levene's Test was used to say that the two groups are comparable (there is the basis for comparison). The null hypothesis (for Levene's Test) ***Ho*: Variances of the two groups are the same**. Based on the table above (mean gain scores between experimental and control), is **NOT rejected**. The test statistics used in rejecting Ho is the F-test and has a value of 0.050 and *p-value* of 0.823 which is greater than 0.05 level of significance. Thus, the findings conclude that the two groups have the same variance.

In comparing the means of the two groups, it can be seen from the Table that the t-value is 0.956 and the p-value of 0.342 which is greater than 0.05 level of significance, thus *Ho: There is no significant difference in the mean gains scores of pupils between the control and experimental groups* is NOT Rejected. Therefore, the result is NOT significant.

It means that on average, mean gains scores of pupils between the control and experimental groups are the same.

This finding is somewhat the same as the study of (Inok, 2008) about cooperative learning strategy. She found that cooperative learning is not more effective than non-cooperative learning with respect to English students' achievement and retention in this study; this suggests there may be additional reasons to use cooperative learning.

This finding is somewhat the same as the study of Ismael (2005), entitled "Effects of Traditional versus Directed Reading-Thinking Activity on Students' Orthographic Knowledge". A *t* test indicated no significant difference between the traditional and Directed Reading-Thinking Activity (DR-TA) groups' pretest scores. In order to compare the post-test scores, an ANOVA was performed.

It was concluded that both strategies were both effective to the learners. Either of the two can be used as an effective strategy in teaching spelling.

This study has shown that cooperative learning strategy was as effective as non-cooperative strategy regarding teaching vocabulary, so concerns about the effectiveness of cooperative learning methods in these areas have been addressed. Students taught by cooperative methods should perform equally as well as students taught by non-cooperative methods. In addition, student attitudes toward cooperative learning are similar to non-cooperative learning.

7. Conclusions

Based on the findings, analysis and interpretations of the collected data the following conclusions were drawn:

1. A cooperative learning strategy is effective in teaching vocabulary and reading comprehension skills. Thus the reading teacher can use the strategy in teaching the lesson.
2. The traditional strategy is also effective in teaching vocabulary and reading comprehension skills. Therefore, reading teachers can still use the traditional strategy in teaching the lesson.
3. For effective teaching, either of the two strategies requires that pupils be cooperative in all the lesson activities they are learning. They must also be participative in high order thinking exercises, such as analysis, synthesis, and evaluation.

4. Both cooperative and traditional strategies are effective; therefore, reading teachers can integrate the two strategies to enhance learners' vocabulary and reading comprehension skills for better results.

8. Implications

From the findings and conclusions, the following implications are hereby deduced:

1. There is no single "best" learning strategy to teach vocabulary and comprehension skills to learners.
2. Whatever learning strategy is used in the classroom needs to take account of learners' current knowledge so that they can work within their zone of proximal development and thus progress.

9. Recommendations

After carefully considering the findings, conclusions and implications, the following recommendations are hereby presented:

1. In as much as both cooperative and traditional learning strategies were proven to be effective, it is strongly recommended that English - Reading teachers should use the Cooperative Learning Strategy because it is motivating to the learners, and they learn to work as teams via mutual help and complementation.
2. English-reading teachers should try to use different strategies along with the Cooperative Learning Strategy to improve the learners' vocabulary and comprehension skills.
3. A similar study should be conducted on another topic in English - Reading or another subject area.
4. Cooperative Learning strategy should be experimented in primary and secondary levels.
5. A similar study should be conducted in other schools to reinforce, complement, prove or disprove the results of this study.

References

[1] Almanza T. (1997), *Effectiveness of cooperative learning in small groups with whole classroom instruction using the directed reading thinking activity DR-TA during reading* [Unpublished Dissertation] University of the Philippines.

[2] Almanza T. (1997), *Effectiveness of cooperative learning in small groups with whole classroom instruction using the directed reading thinking activity DR-TA during reading.* London: Penguin.

[3] Andamen, E. (1983). *The legend of reading comprehension and reading vocabulary of the grade six pupils in the division of Maguindanao*. Unpublished Master's Thesis, MSU, Marawi City.

[4] Anderson, R.C. and P. Freebody (1981). *Vocabulary knowledge*. in comprehension and teaching: research prospective, ed. J.T. Guthrie, Newarl, Del: International Reading Association.

[5] Anderson, R.C. and Shifrin Z. (1980). *The meaning of words in context.* In theoretical issues in reading comprehension. Ed. Rand J. Spiro, Bertram C. Bruce, and William F. Bewer. Hillsdale, N.J.: Lawrence Erlbaum, 1980. This article provided a theoretical base for the consideration of meanings of words.

[6] Ariza, E. N. and Hancock, S. (2003) *Second language acquisition theories as a framework for creating distance learning.* New York Press

[7] Bafile, C. (2008). *The 'Jigsaw' approach brings lessons to life*. http://www.education-world.com/a_curr/curr324.shtml

[8] Baker, L. *Developmental change in readers' responses to unknown words."* Journal of Reading Behavior 21, no. 3 (1989): 241-59. An investigation of third and fifth graders indicated that third graders relied on word length to determine comprehensibility, while fifth graders were more sensitive to meaning.

[9] Barr, R. and B. Johnson (1997). *Teaching reading and writing in elementary classroom (2nd ed):* New York Longman

[10] Barton, J. (2001). *Teaching vocabulary in the literature classroom. English Journal, V.90. 4*

[11] Brown, M. (1990) *All about cooperative learning:* Huntington Beach, CA: Teacher Created Materials.

[12] Brown, W.M.C. (1992). *The reading process and teaching of literature.* The Strategies and Skills of Reading. Ed. P. L. Tavenger, M.A. Agria 1992. *(pp. 197-390)* United States of America Wm.C. Brown Communication Inc.

[13] Chen, H. (1998). The performance of junior college students studying English through cooperative learning. Proceedings of the 7th international symposium on English teaching. 231-240. Taipei: The Crane Publishing.

[14] Chen, H. (1999). A comparison between cooperative learning and traditional, 166 whole class method—teaching English in a junior college. *Academic Journal of Kang-Ning*, 3, 69-82.

[15] Cheng, C. (2000). *Cooperative learning in second language instruction*. Hwa Kang

[16] Cohen, E. G. (1994). *Designing groupwork: strategies for the interogeneous classroom.* New York Teacher's College Press

[17] Daneman, M.A. et al (1987) *Word knowledge and reading skill. In reading research: Advances in theory and practice, 6.* California: Academic Press, Inc. *Digest*, *64*(7), 29-37.

[18] Dimaporo J. (2001), *The cooperative learning in public schools in Iligan City: Issues and challenges in raising the quality of teaching*. Unpublished Master's Thesis in St. Peter's College.

[19] Felder, R.M. and Brent R. (2001). *Effective strategies for cooperative learning. Journal Cooperation & Collaboration in College Teaching.*

[20] Handley, A.O. (2001), *Teaching language in context (3rd ed.).* Boston: Heinle & Heinle

[21] Hovhannisyan, A., & Sahlberg, P. (2010). Cooperative learning for educational reform in Armenia. *Intercultural Education*, *21*(3), 229-242.

[22] Inok, R. (2008) *The effectiveness of cooperative learning strategy in enhancing reading comprehension among freshmen students at Adiong National High School*. [Unpublished Master's Thesis]. MSU, Marawi City.

[23] Ismael, S.B. (2005). The effects of cooperative learning in enhancing writing performance. University Kebangsaan Malaysia

[24] Ismail, S. The Effects of Cooperative Learning in Enhancing Writing Performance http://teslj.org/Techniques/Tan-cooperative.html

[25] Johnson, D. & Johnson, R. (1989). *Cooperation and competition: Theory and research*. Edina, MN: Interaction Book Company.

[26] Johnson, D. & Johnson, R. (1990). Social skills for successful group work, *Educational Leadership*, *47*(4), 29-33.

[27] Johnson, D. & Johnson, R. (1994). Learning together and alone: Cooperative, competitive, and individualistic learning (4th Ed.). Boston: Allyn & Bacon. *Journal of Foreign Languages & Literature*, 7, 185-195.

[28] Kessler, Carolyn (Ed). (1992). *Cooperative learning: A teacher's resource book.* Englewood Cliffs, N J: Printice Hall Regents.

[29] Knight, L.F. and Silbor S.F. (2006). *A 2 Z Creative teaching methods.* Part IV: A 2 Z Teaching Methods. Church Strengthening Ministry, Inc. ed. Daffodil C. Dedel *(pp. 32-34)*

[30] Laban S. and Sabacajan E. (2002), *The reading comprehension skills among First Year high school students from MSU - Integrated Laboratory School students.* Unpublished undergraduate Thesis, MSU, Marawi City.

[31] Lardizabal, A. S. et al *Principles and methods of teaching.* Quezon City: Phoenix Publishing House, Inc.

[32] Long, M., and Porter, P. (1985). *Groupwork and interlanguage talk and second language acquisition.* TESOL Quarterly.

[33] Lu, C. Q. (2005). Design and implementation of group activities in English classroom teaching]. *Journal of School of Foreign Languages, Shandong Normal University (Basic English Education)*, 4.

[34] Ma, H. (2008). *An effective way of cooperative learning— Group activities*. *Journal of Liaoning Administrative Institute*, 10.

[35] McLaughlin, B. (1987). *Reading in a second language: Studies with adult and child learners.* Norwood, NJ. Ablex.

[36] Meng, F. S. (2003). *The application model and method of jigsaw II to foreign language teaching. Foreign Language Audio-visual Teaching*, 2.

[37] Muray, D. M. (1982). *Learning by teaching. Selected articles on writing and teaching.* Boynton/Cook

[38] Ordona (1981), and Ferrer (1981) What parents can do? Florida Literacy and Reading Excellence Center College of Education • University of Central Florida • Orlando, FL32816http://flare.ucf.edu/

[39] Palasan, A. (1999). *The reading proficiency, study habits, and attitudes of Grade Five pupils at MSU – Integrated Laboratory School basis for a reading instructional design.* Unpublished Master's Thesis, MSU, Marawi City.S(1983)

[40] Pampolina S. (1983) Socioeconomic background modulates cognition–achievement relationships in reading. Unpublished Master's Thesis, Xavier University, Cagayan De Oro.

[41] Pangcatan, J. M. (2006). *The effectiveness of dimensional approach in teaching reading comprehension among Grade VI pupils.* Unpublished Master's Thesis, MSU, Marawi City.

[42] Qu, B. (2008). *Cooperative learning: A learner-interdependent teaching Model. Introduction Journal to Scientific and Educational Innovation in China*, 34.

[43] Radiamoda, J. S. & Lenogon, K. G. (2007), *Variables associated with the reading level of grade six of MSU-ILS.* [Unpublished Undergraduate Thesis] MSU, Marawi City.

[44] Randall V. (1999). *Cooperative learning: Abused and overused? The Educational Digest, 29*

[45] Randi (2001), *Lack of vocabulary knowledge can be attributed to parental influence and socio-economic factors.* Unpublished Master's Thesis, MSU, Marawi City.

[46] Rumelhart, D.E. (1980). *Schemata: the building blocks of cognition.* Hillsdale: Lawrence Erlbaum Associates. Google Scholar

[47] Sacar, A. E. (2008). *Explicit and implicit teaching strategies, and problems encountered by English teachers, their effects on vocabulary building of Grade VI pupils.* [Unpublished Master's Thesis], MSU, Marawi City.

[48] Santos (2001), *A case study research on cooperative learning by using the jigsaw technique with nine second-year English major students at Xavier University.* [Unpublished Master's Thesis], Xavier University, Cagayan De Oro.

[49] Sawyer, R. K. (2004). *Creative teaching: Collaborative Discussion as deisciplined improvisation.* Educational Researcher. http//dx.doi.org/10.3102/0013189X033002012

[50] Schniedewind N. and Davidson E. (2000). *Differentiating cooperative learning.* Educational Leadership Journal, 24

[51] Slavin, R. E. (1983*). Cooperative learning. New York: Longman. Wang, C. L. 2002. Exploration on cooperative learning strategy*. *China Audiovisual Education*, 8.

[52] Slavin, R.E. (1988). Cooperative learning and student achievement in R.E. Slavin (ed), school and classroom organization. Hillsidale, NJ: Elbaum.

[53] Slavin, R.E. (1988). *Cooperative learning and student achievement.* In R.E.Slavin (Ed.), School and Classroom. Organization.Hillsdale, NJ:Erlbaum.

[54] Slavin,R. (1985). *An introduction to cooperative learning research, learning to cooperate, cooperating to learn*. New York: Plenum Press.

[55] Somapee, A. (2002). Foreign language instruction and curriculum. *The Education*

[56] Stahl, S.A. (1999). Vocabulary development. Newton Upper Falls, MA Brookline Books.

[57] Stanovich, K. (1981). *Attentional and automatic context effects. In interactive processes in reading.* Ed. A lesgold and C. Perfetti. Hillsdale, N.J. Erlbaum

[58] Tejero, E.G. (2002). Teaching reading in the elementary grades. Mandaluyong City: National Bookstore Inc.

[59] *Tok Hoon Seng 2006. Cooperative learning and achievement in English language Acquisition in a literature class in a secondary school* http://www.tokhoonsengmp041194d06ttt

[60] Villamin, A. M. et al. (1994). Innovative strategies in communication arts. Phoenix Publishing House, Inc.: Quezon City

[61] Villaruel, R. (2008). *Factors affecting reading comprehension of MSU-ILS fourth year students during S.Y. 2007-2008: A basis reading enhancement.* Unpublished Undergraduate Thesis, MSU, Marawi City.
[62] Vygotsky, L.S. (1978). *Mind and Society.* Cambridge, Harvard University.
[63] Wadsworth, B.J. (1984). *Piaget's theory of cognitive and affective development* (3rd Ed.). New York/Longman
[64] Wang, X. N. (2002). *Application of classroom group activities to the sophomores' English intensive reading. Journal of Beijing Second Foreign Language University*, 3.
[65] Wang, T. P. (2009). Applying Slavin's cooperative learning techniques to a college EFL conversation class. *The Journal of Human Resource and Adult Learning*, *5*(1), 112-120.
[66] Webb, N.M. (1989). *Peer Interaction and learning in small groups.* International Journal of Education.
[67] Yazdanpanah K. (2003) An investigation into the factors affecting the use of language learning strategies by Persian EFL learners. Département de langues, linguistique ettraduction, Université Laval, Québéc, QC, G1K 7P4
[68] Yu-hwei Shih & Chiou-lan Chern, (2002) *Implementing cooperative learning in EFL teaching: Process and effect.* http://www.Thesis_Liang_Tsailing
[69] Zints, M. V. The reading process: The teacher and the learner. 3rd edition Dubuque, Ibera: Brown Company Publishers, 1980.
[70] Zints, M. V. *The reading process: The teacher and the learner*. 3rd edition Dubuque, Ibera: Brown Company Publishers, 1980.