COOPERATIVE LEARNING STRATEGIES IN TEACHING ARALING PANLIPUNAN AND THE LEVEL OF LEARNING COMPETENCIES OF GRADE 10 STUDENTS



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Cooperative Learning Strategies in Teaching *Araling Panlipunan* and the Level of Learning Competencies of Grade 10 Students

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Abstract

This study investigates the efficacy of cooperative learning strategies as instructional tools for teaching Araling Panlipunan to Grade 10 students at Dolores Macasaet National High School in Candelaria, Quezon Province. Five sections of Grade 10 students were subjected to cooperative learning methods, namely Tea Party, Numbered Heads Together, and Student Teams Achievement Division (STAD). Employing an experimental research design, specifically the pretest-posttest design, the study assessed the effectiveness of these strategies across three competencies: knowledge, understanding, and valuing. Pretests and posttests were administered to measure the impact of cooperative learning on student performance. The findings refute the null hypotheses, indicating significant improvements in pretest and posttest scores across all competencies. Furthermore, One-Way ANOVA analysis demonstrates notable disparities in pretest and posttest performance among the respondents. Based on these conclusions, several recommendations are proposed. Firstly, teachers are encouraged to integrate cooperative learning strategies into their pedagogical approach, fostering deeper content comprehension, enhancing academic achievement, and promoting self-esteem and motivation among students. Secondly, school administrators are urged to organize workshops and demonstration sessions to familiarize educators with the benefits of cooperative learning. Additionally, the integration of cooperative learning techniques is advocated not only in Araling Panlipunan but also across other subject areas. Finally, educators are advised to diversify and enrich cooperative learning activities to facilitate engaging peer interactions and foster collaborative learning experiences for students. This study underscores the potential of cooperative learning strategies in enhancing student learning outcomes and suggests avenues for further research and application in educational settings.

Keywords: leaning competency, learning strategies, Araling Panlipunan

Introduction

Cooperative learning has emerged as the leading new approach to classroom instruction. One important reason for its advocacy is that numerous research studies in K-12 classrooms, in various diverse school settings and across a wide range of content areas, have revealed that students completing cooperative learning group tasks tend to have higher test scores, higher self-esteem, greater number of positive social skills, fewer stereotypes of individuals, of other races or ethnic groups and greater comprehension of the content and skills they are studying (Kagan & Kagan, 2016).

In cooperative learning, social skills can be developed, such as leadership, decision-making, trust-building, communication, and conflict management. Students will also benefit from cooperative learning psychologically because with cooperative learning experiences, more positive attitudes of students towards learning will be promoted. Also, student satisfaction with the learning experience will be enhanced. Each member should be taught to interact with the other members of the team and be aware that he has to make a significant contribution in the achievement of the goal and each one has equal opportunities for success (Kagan & Kagan, 2016).

Group work provides students with important learning opportunities, but some new teachers stay away from it because of unsuccessful early experiences. Cooperative learning benefits the individual learner as well as the learning community. Students working in groups can become hands-on participants, where in a general classroom discussion they may be too shy to speak up. They learn social skills they cannot learn in independent work. They learn to pool their resources and expand their potential, rather than limit themselves to the knowledge they can learn on their own. Group work has great potential to enhance student learning, but only when the students exhibit the collaboration skills do they work effectively with others. A teacher can go a long way toward fostering these skills and helping students learn the group dynamics necessary for success in schools, workplace, and in society (Stahl, 2016).

Many projects lend themselves to group work, especially those in which students need to brainstorm ideas or learn a large or complex body of information. Teams can often accomplish no one individual could accomplish on his/her own. An ideal group project does not ask students within a group to duplicate one another's effort but asks them to produce something new. It results in a product more comprehensive than any one member could have created alone in the same amount of time. Cooperative groups let students magnify their learning while building a sense of camaraderie (Stahl, 2016).

The provisions stipulated in Enclosure No. 1 of DepEd order No. 31, s. 2012 entitled Policy Guidelines on the Implementation of Grades 1 to 10 of the K to 12 Basic Education Curriculum (BEC) Effective School Year 2012 - 2013 shall remain in force. Nomenclature/learning Area and Its Description specifically for *Araling Panlipunan* (AP), which has additional information and corrections and shall read as follows: For Grades 7 to 10 - "*Ang asignaturang ito ay naglalayong magpamalas ng malalim na pang-*

unawasa mga pangunahing kaisipan ng mga napapanahong isyu sa pag-aaral nkasaysayan, pamahalaan, kultura at lipunan ng mga rehiyong Asyano;kasaysayang pandaigdig; mga kaisipan sa ekonomiks at pambansang pag-unlad at napapnahong isyu at hamong panlipunan"

It implies that critical thinking must be developed among students in this learning area, also because one of the thrusts of the Philippine education is the development of critical thinking skills in all subject areas among learners. Hence, deeper understanding of the content is required.

In teaching *Araling Panlipunan* in almost all settings, teachers handling this subject resort to the application of traditional teaching approach. With this approach which is individualistic in nature, learners tend to compete with each other individually. One approach customarily applied is the conceptual approach. In this approach, subject matter is taught to enable students to develop concepts which vary from one person to another, depending on previous experiences. One does not learn another learner's concept. A student therefore develops his own from the subject matter he studies. In concept building, the teacher provides a broad background of the unit content, builds one background for the students, determine which concepts and generalizations to emphasize, consider available books and other materials which can be used to deepen understanding and formulates questions and problems that challenge thinking and resourcefulness.

In teaching for conceptual thinking, the teacher provides a careful balance between "firsthand" experiences, where many experiences may be built "in action," and verbal experiences, where concepts are extended and carefully defined. In this way, learners build a wider meaning from an experience because they step back from it, analyze it, and "abstract" from it the meaning which they have built. It has been observed that in Dolores Macasaet National High School, another strategy that teachers use is the reporting method wherein individual student is assigned a topic to be discussed in front of the class. Students rarely interact with the reporter who resorts to reading orally without further elaboration.

From this, no perceived benefit is evident that students develop deeper understanding of the subject matter. This situation drives the researcher to investigate more teaching strategies like the three examples of teaching strategies: Student Teams Achievement Division (STAD), Numbered Heads Together and Tea Party. The researcher is hopeful that these strategies will develop Grade 10 students' critical thinking in understanding their lessons. According to Dotson (2018), Social Studies classes lend themselves to cooperative learning methods due to skills and values within the curriculum. Students may use their thinking, communication, and information sharing skills to increase their content knowledge as well as their interpersonal skills. Karnes & Collins (Dotson, 2018) suggests to implement cooperative learning structures within the Social Studies structures. With this suggestion, the proponent is motivated to determine the effectiveness of cooperative learning strategy in teaching *Araling Panlipunan* among Grade 10 students in Dolores Macasaet National High School.

Research Questions

This study determined the effectiveness of the cooperative learning strategy as an instructional strategy in teaching *Araling Panlipunan* among Grade 10 students of Dolores Macasaet National High School. Specifically, this study sought answers to the following questions:

- 1. What is the pretest score in the following competencies before using cooperative strategies:
 - 1.1. knowledge;
 - 1.2. understanding and
 - 1.3. valuing?
- 2. What is the post score of the respondents in the following competencies after using cooperative strategies:
 - 2.1. knowledge;
 - 2.2. understanding and
 - 2.3. valuing?
- 3. Are there significant differences in the pretest and post test scores of students after undergoing instruction using cooperative learning strategies in the following competencies:
 - 3.1. knowledge;
 - 3.2. understanding and
 - 3.3. valuing?
- 4. Is there a significant difference in the pretest performance of the respondents in the following competencies:
 - 4.1. knowledge;
 - 4.2. understanding and;
 - 4.3. valuing?
- 5. Is there a significant difference in the post test performance of the respondents in the following competencies using cooperative learning strategies:
 - 5.1. knowledge;
 - 5.2. understanding and;
 - 5.3. valuing?

Methodology

Research Design

This study applied the experimental research design specifically the pretest-posttest design. Experimental design is a problem-solving approach that is described when variables are carefully manipulated. This method was applied to the respondents to determine the effectiveness of Students Team Achievement Division (STAD), Numbered Heads Together and Tea Party as cooperative learning strategies in *Araling Panlipunan* Grade 10. The effectiveness of these variables was assessed in pretest as preliminary activity and posttest as post experimental activity.

Respondents

The subjects of this study were the population of five Grade 10 classes composed of 201 students in Dolores Macasaet National High School, during the Second Quarter of School Year 2018 - 2019. In the population of 5 Grade 10 sections composed of Narra, Mahogany, Yakal, Acacia and Dao, the 5 groups of samples were selected purposively because they are the sections handled by the researcher. All students in each selected section were all involved in the study.

Table 1. Distribution of Respondents by Section							
Section	Number of Respondents	Percentage Distribution					
Narra	40	19.90%					
Mahogany	41	20.40%					
Yakal	43	21.39%					
Dao	37	18.41%					
Acacia	40	19.90%					
Total	201	100%					

Instruments

Lesson plans were prepared for the experimental activity. To determine the effectiveness of the three cooperative learning strategies two sets of test were prepared: Part I was Pre Test composed of 60 items that measure knowledge, understanding and valuing skills of the respondents; Part II was Post Test with 60 items also and measuring the same skills of the respondents. As for content validity of the instruments, Table of Specification for PreTest as well as the Table of Specification for Post Test was made to be the basis of the construction of the tests. The tests were also presented to the DepEd teaching personnel composed of Master Teacher and Social Studies Subject Coordinator for validation.

Procedure

Before the conduct of the study, the researcher initially sought the consent of the Dean of Graduate Studies and Applied Research (GSAR) of the Laguna State Polytechnic University – San Pablo City as well as asked the permission from those personnel of Department of Education – Division of Quezon, the Schools Division Superintendent and the Public Schools District Supervisor and the Principal of Dolores Macasaet National High School.

The procedure of collecting data was chronologically performed as follows: Pre Test was administered to the respondents before the treatment was applied. Application of cooperative learning strategies as treatment. The procedures of teaching and learning process (treatment) are presented as follows: Post Test (after all lessons are taught and the three strategies are applied). In Tea Party, students form circle, one inner circle and the other outer circle. Teacher asks questions. Students facing each other discuss the answer on a given question. Students in the outer circle move in one direction and face another student. Teacher asks another question. Students facing each other discuss the question. Procedure is repeated until all questions are answered. Teacher asks the question and calls a student to answer and so on. In Numbered Heads Together, students are divided into small groups. Materials are presented and discussed by teacher. Students work on exercise and work sheet. A quiz is given. In STAD strategy, students are divided in some small heterogeneous groups (composed of students with different academic capabilities) Materials are presented and discussed by teacher. Students work sheet and quiz is given.

Data Analysis

The following measures were used in the study: Frequency Count and Percentage of distribution of respondents according to competencies; Mean scores in pretest and posttest; Test of difference in pretest and posttest in the three competencies.

Results and Discussion

Table 2 shows the pretest results of the respondents in knowledge. It can be observed that majority of the respondents, 68.16% obtained 7 - 12 scores in pretest in Araling Panlipunan which is described as fair. 36 or 17.91% got good result with scores of 13 - 18 while 13.93% or 28 got poor result with scores 0-6. Nobody got excellent and very good scores.

Table 2. Pretest R	esults of the Resp	oondents in Know	ledge
Score	F	%	Description
25 - 30	-	-	Excellent
19 - 24	-	-	Very Good
13 - 18	36	17.91	Good
7 - 12	137	68.16	Fair
0-6	28	13.93	Poor
Total	201	100	

Based on pretest results it can be implied that the respondents have varied abilities before cooperative learning strategy was applied by the researcher. In every cooperative learning strategy, the respondents are grouped heterogeneously in each team.

Table 3. Post Test	Results of the R	espondents in Kno	owledge
Score	F	%	Description
25 - 30	1	0.5	Excellent
19 - 24	46	22.89	Very Good
13 - 18	77	38.30	Good
7 - 12	65	32.34	Fair
0 - 6	12	5.87	Poor
Total	201	100	

Table 3 shows post test results revealed that the knowledge competency of the respondents. 38.30% or 77 obtained 13 - 18 out of 30 items which is considered good; 32.34% or 65 obtained fair scores but there is one who got an excellent score.

After the treatment, there are respondents who got excellent and good scores while the number of respondents who got fair and poor score decreased. Based on the comparative results of pretest and post test, it can be assumed that the respondents learned from cooperative learning as indicated by their knowledge competency.

According to Johnsons and Fernandez (2011), cooperative learning is an instructional use of small groups so that students work together to maximize their own learning. Likewise cooperative learning is inherently more complex than competitive or individualistic learning because students have to engage in task work and teamwork simultaneously. Group members are part of the team and that any success or failure of the group will be shared by all the members of the group.

Table 4. Pre Test	Results of the Res	spondents in Und	lerstanding
Score	F	%	Description
17 - 20	-	-	Excellent
13 - 16	1	0.50	Very Good
9 - 12	23	11.44	Good
5 - 8	116	57.71	Fair
0 - 6	61	30.35	Poor
Total	201	100	

As shown in Table 4, the majority of the respondents, 57.71% or 116, obtained a fair score of 5 - 8 out of 20 items in understanding; and 30.35%, or 61, obtained a poor score of 0 - 4. However, one respondent got very good score of 13 - 16. The findings imply that most of students performed fair in the pre test results in understanding. It is normal maybe because they have no knowledge yet of the subject matter.

Table 5. Post Test Results of the Respondents in Understanding					
Score	F	%	Description		
17 - 20	-	-	Excellent		
13 - 16	19	9.45	Very Good		
9 - 12	89	44.28	Good		
5 - 8	70	34.83	Fair		
0 - 6	23	11.44	Poor		
Total	201	100			

Table 5 shows post test results in the understanding competency reveal that 89 respondents or 44.28%, and obtained good score of 9-12; 34.83% or 70 obtained fair score of 5 - 8. Only 9.45% or 19 students obtained very good score of 13 - 16 in their post test in terms of understanding.

Considering the obtained results, it is evident that the respondents had improved their understanding competency after the treatment. The increased in the frequency count of 89 and above of those who got the score of 9 - 16 is an evident that the performance of students in understanding (post test) improved. This implies that cooperative learning strategy is effective in teaching some topics in Araling Panlipunan.

In the study of Stahl (1994), he stressed that cooperative learning has emerged as the leading new approach to classroom instruction. One important reason for its advocacy is that numerous research studies in K-12 classrooms, in very diverse school settings and across a wide range of content areas, have revealed that students completing cooperative learning group tasks tend to have higher scores, higher self-esteem, greater number of positive social skills, fewer stereotypes of individuals, and greater comprehension of the content and skills they are studying (Cabral, 2015).

Table 6. Pre Test	Results of the Re	spondents in Valu	ung
Score	F	%	Description
9 - 10	1	0.50	Excellent
7 - 8	16	7.96	Very Good
5 - 6	43	21.39	Good
3 - 4	84	41.79	Fair
0 - 2	57	28.36	Poor
Total	201	100	

Table 6 shows that in pretest results in valuing, 84 or 41.79% obtained fair score of 3 - 4 out of 10 items and 28.36\% or 57 obtained poor score of 0 - 2. However, one among them got an excellent score. There were 60 out of 201 who got the scores of 5 and above.

Table 7. Post test	Results of the R	espondents in Valui	ng
Score	F	%	Description
9 - 10	8	3.98	Excellent
7 - 8	79	39.30	Very Good
5 - 6	59	29.35	Good
3 - 4	37	18.49	Fair
0 - 2	18	8.96	Poor
Total	201	100	

Table 7 shows that in the post test for valuing show that very good scores of 7 - 8 were obtained by majority of 39.30% or 79 respondents and 29.35% or 59 obtained good scores of 5 - 6 and 8 or 3.98% got excellent scores of 9 - 10. From these results, it can be assumed that the valuing competency of the respondents had improved.

There are benefits from small-group learning in a collaborative environment, including the celebration of diversity. Students learn to work with all types of people. During small group interactions, they find many opportunities to reflect upon and reply to the diverse responses fellow learners bring to the questions raised. Small groups also allow students to add their perspectives to an issue based on their cultural differences. This exchange inevitably helps students to understand other cultures and points of view better. Acknowledgment of individual differences. When questions are raised, different students will have a variety of responses. Each of these can help the group create a product that reflects a wide range of perspectives and is thus more complete and comprehensive. Interpersonal development. Students learn to relate to their peers and other learners as they work together in group enterprises. This can be especially helpful for students who have difficulty with social skills. They can benefit from structured interactions with others. Actively involving students in learning. Each member has opportunities to contribute in small groups. Students are apt to take more ownership of their material and to think critically about related issues when they work as a team.

However, the finding of this study is unparalleled with the study of Parveen et al. (2010) wherein cooperative learning was not found to be a better instructional strategy in grade 8 Social Studies, it was recommended to utilize other teaching strategy different from cooperative learning. In a study of an unknown author in UK Essays (2017), it was concluded that there is significant difference in the results of experiment and control groups which shows STAD model of cooperative learning method is more effective than traditional teaching methods.

Furthermore, in the study of Asi (2011), the significant difference between the mean posttest sores of the experimental and control groups indicates that cooperative learning strategy has increased the level of pupils' achievement in Science and Health V. Asi concluded that pupils have better comprehension and retention when subjected to cooperative learning strategy. The study implies that pupils, who have opportunities to work collaboratively, learn faster, and with greater retention, more efficient and feel more positive about the learning experience, thus increasing the level of their achievement. Pupils can also do and achieve more than what they usually attain, if there is a provision of a learning strategy suited to their mental ability.

Table 8. Test of Difference in the Pre Test and Post Test Performance of the Respondents UsingCooperative Learning Strategies as to Knowledge

cooperative Learning Strategies as	io mov	ricuze					
	Pre	Test	Post	Test	t - value	p - value	Remarks
Cooperative Learning Strategies	М	SD	М	SD			
Tea Party	80.39	4.67	84.64	5.26	8.32	0.00	Significant
Numbered Heads Together	77.43	4.10	83.09	5.94	11.20	0.00	Significant
STAD	79.27	5.01	85.68	7.91	11.37	0.00	Significant
Legend: prob < .05 Significant							

From the table, findings revealed that there is significant difference between the pre test and post test performance of the respondents as to knowledge using cooperative learning strategies as to Tea Part, Numbered Heads Together and STAD.

It illustrates that the test of difference in the pre test and post test, all the three cooperative learning strategies: The Tea Party, Numbered Heads Together and STAD are all significant with a p-value of (0.00).

The finding shows that by using the cooperative learning strategy like Tea Party, Numbered Heads Together, and STAD improve the performance of the student in Social Studies, this may be true because student exchange ideas through interactions thus lesson is better understood by students than the traditional way of teaching Social Studies that is through lecture given by the teacher.

It shows that the test of difference in the pre test and post test performance of the respondents using the cooperative learning strategies as to knowledge. It can be noticed from the table that all of the cooperative learning strategies registered significant differences as to knowledge. All have a p-value of 0.00 while Tea Party strategy proved with t-value = 8.32, Numbered Heads Together with t-value = 11.20 and STAD with a t-value = 11.37

It is understood that the utilization of these three cooperative learning strategies differs in terms of knowledge competency. However considering the pre test and post test results, there are improvement that was established in the post test. Although the Student Team Achievement Division (STAD) strategy got the highest mean in the post test.

The results of the test of difference in the three cooperative learning strategies may imply that all the three strategies are effective in teaching *Araling Panlipunan* 10. However, based on the mean gain in the pretest and post test mean scores of the three strategies, it came out that STAD is the best strategy in improving the knowledge level of the respondents since it garnered the highest mean gain of 6.41.

This finding is supported by the study of Parveen and Batool (2011), wherein the academic performance of Grade 9 students in General Science before treatment significantly different after treatment using cooperative learning strategy.

However, the finding of this study is unparalleled with the study of Parveen and others (2010) wherein cooperative learning was not found to be a better instructional strategy in Grade 8 Social Studies, it was recommended to utilize other teaching strategy different from cooperative learning strategy.

This finding is supported by the finding of Alabekee (2015) in which STAD as a cooperative learning, enabled learners to receive positive feedback from the process of thinking, enhances students' academic achievement better than the traditional instruction and promotes group interactive learning experience. Students in this approach tutor one another; they are likely to acquire greater mastery of the lesson than in a common individual study.

Knowledge competency can be improved in using STAD because in this cooperative learning strategy, a teacher teaches students in a team and ensure that they have mastered the lesson. It encourages the student to take up responsibilities for other members in the group as well for themselves. In this way, it is guaranteed that all group members with different levels are equally motivated to do their best (STAD, 2018).

Cooperative Learning Strategies as to Onderstanding							
	Pre 2	Test	Post	Test	t - value	p - value	Remarks
Cooperative Learning Strategies	М	SD	М	SD			
Tea Party	77.76	5.40	80.54	5.69	5.15	0.00	Significant
Numbered Heads Together	79.40	6.13	84.77	7.86	7.79	0.00	Significant
STAD	78.71	5.21	83.20	5.84	8.79	0.00	Significant

 Table 9. Test of Difference in the Pretest and Post Test Performance of the Respondents Using

 Cooperative Learning Strategies as to Understanding

Legend: prob < .05 Significant

Table 9 showed that the respondents' pre test in terms of understanding revealed that using cooperative learning strategies as to Tea Party, Numbered Heads Together and STAD is significantly different from the post test.

Similarly to Table 8, all cooperative learning strategies such as Tea Party, Numbered Heads Together, and STAD show significant at p-value of 0.00. In using the three strategies it was found out that Numbered Heads together posted significant increased in the score of post test which is 84.77. It is understood that in developing the competency level of students in understanding, the Numbered Heads Together is more appropriate to apply as cooperative learning approach.

The t-value=10.708 (p=.000) connotes that there is significant difference between the pretest and post test mean scores. Therefore, the competency of the respondents in the understanding competency has improved after using cooperative learning strategy.

The study of Asi (2011) supports the finding of this study. In Asi's study, it was found out that pupils who are exposed to cooperative learning strategy gained more understanding of the subject matter in Health and Science, thus there is higher posttest score and high level of achievement after the treatment

According to Kagan (2015), cooperative learning strategy in which small teams composed of students of different levels of ability may use a variety of learning activities to enhance their level of understanding of a particular subject.

Based on the results, it can be implied that cooperative learning strategies applied in the study are all effective in improving understanding of the respondents in *Araling Panlipunan* 10. However, among the three cooperative learning strategies, Numbered Heads Together stands out to be the best strategy in improving understanding, since it garnered the highest mean gain in pretest and post test mean scores of 5.37.

In Numbered Heads together, students work together in their groups to discuss and determine an answer to the question. In this strategy, each individual student can offer their thoughts and ideas. All group members should be prepared and able to answer the given question (Colorado, 2015). This strategy is effective in developing understanding of the students because from the thoughts and ideas shared by members of the group, student gain deeper understanding the topic or content under discussion.

 Table 10. Test of Difference in the Pretest and Post Test Performance of the Respondents Using

 Cooperative Learning Strategies as to Valuing

cooperative Zearning Strategies as to valuing							
	Pre	Test	Post	Test	t - value	p - value	Remarks
Cooperative Learning Strategies	M	SD	М	SD			
Tea Party	82.23	8.62	92.33	9.00	12.41	0.00	Significant
Numbered Heads Together	81.34	9.09	86.76	9.59	6.96	0.00	Significant
STAD	79.52	7.33	83.57	7.35	5.91	0.00	Significant

Legend: prob < .05 Significant

From the table, findings illustrated the significant difference between the pre test and post test performance of the respondents in terms of valuing using cooperative learning strategies as to Tea Party, Numbered Heads Together and STAD.

Thus, in cooperative learning, activities give equal importance, creating balance within the process, encouraging participation, acknowledging, prior learning, and making time for issues which ensure better cooperative efforts among students.

Table 10 revealed having a p-value=0.00 which gives an impression of significant difference in the pretest and post test performance of the respondents in *Araling Panlipunan* 10 with the following results: Tea Party (t-value=12.41), Numbered Heads Together (t-value=6.96) and STAD (t-value=5.91).

It can be implied from the results that the three cooperative learning strategies are effective in improving valuing competency of respondents in *Araling Panlipunan* 10.

Comparatively, the mean gain in pretest and post test mean scores of the three strategies revealed that the Tea Party strategy got the highest mean, signifying that it is the best among the three strategies in improving valuing competency of the respondents in *Araling Panlipunan* Grade 10.

Tea Party strategy is useful because not only does it allow for all students to get a chance and share with another student, additionally, it allows students to work together to come up with a solution. If a student isn't talking, sharing or discussing, they are losing valuable learning time. It requires the participation of each student in the group, and ensures that students are sharing ideas (Colorado, 2015).

Table 11. Test of Difference in the Pre Test Performance of the Respondents						
Learning Competencies	Pre Test	Sum of Squares	Mean Square	F	Significant	
Knowledge	Between Groups	901.29	450.64	21.20	0.000	
	Within Groups	12751.9	21.25			
	Total	13653.19				
Understanding	Between Groups	273.13	136.56	4.35	0.013	
	Within Groups	18806.15	31.34			
	Total	19079.29				
Valuing	Between Groups	770.26	385.13	5.47	0.004	
	Within Groups	42196	70.32			
	Total	42966.26				
Legend: $p < .05 = Significant$	p>.05 Not	Significant				

Table 11 shows the difference in the pretest performance of the respondents in the three learning competencies.

Results indicate that there is significant difference in the pretest performance of the respondents in the following: knowledge (f=.000), understanding (f=.013) and valuing (.004).

It is implied that prior to the treatment of all five groups of respondents, their pretest performance is significantly different. However knowledge has the highest f-value of 21.20 in comparison with understanding and valuing as far as the three learning competencies are concern.

In Bloom's taxonomy, knowledge involves the recall of specific bits of information; specific facts; and knowledge of trends and sequences as identifying periods in Philippine history. In understanding, the student can make use of the material or idea being

communicated without necessarily relating it to other materials or seeing its fullest implications. It includes translation, interpretation and extrapolation. In translation, the student can preserve the original communication or text although the form of communication has been altered. In interpretation, the student can explain or summarize. In extrapolation, can extend trends and tendencies beyond the given data to determine implications, consequences, effects, etc. In valuing, values are organized into some kind of internally consistent system which controls the behavior of the individual.

Learning Competencies	Post Test	Sum of Squares	Mean Square	F	Significant		
Knowledge	Between Groups	678.51	339.25	8.09	0.000		
	Within Groups	25155.84	41.92				
	Total	25834.35					
Understanding	Between Groups	1836.67	918.33	21.45	0.000		
	Within Groups	25679.36	42.79				
	Total	27516.03					
Valuing	Between Groups	7904.48	3952.24	52.22	0.000		
	Within Groups	45404.06	75.67				
	Total	53308.54					
Leasender n < 05 - Significant	Lesender of Q.S. Claudinard and Q.S. Mat Claudinard						

Table 12.	Test o	of Difference	in the	Post Test	Performance	of the Re.	spondents
							1

Legend: p < .05 = Significant p > .05 Not Significant

Results indicated in table 12 show that there is significant difference in the post test performance of the respondents in the following learning competencies: knowledge (f=.000), understanding (f=.000) and valuing (f=.000).

It implies that after the treatment, all types of cooperative learning strategies are all effective in improving knowledge, understanding and valuing competencies of the respondents.

It is also observed that among the three learning competencies, students performed very well in valuing. This is parallel to the findings of Dotson (2018) that using cooperative learning structures among sixth grade students in Social Studies have found the method to be successful across all levels. Positive effects were found in all major subjects, in all grade levels in urban, rural and suburban schools, for high, average and low achievers.

The study of Alabekee et al. (2015) found that cooperative learning enabled learners to receive positive feedback from the process of thinking, enhances students' academic achievement better than the traditional instruction, and promotes group interactive learning experience.

Conclusion

From the findings of the study, the following conclusions were drawn: The hypothesis that there is no significant difference in the pre test and post test scores of respondents in the following learning competencies: knowledge, understanding, and valuing after undergoing instruction using cooperative learning strategies is rejected. The hypothesis that there is no significant difference in the pre test performance of the respondents in terms of knowledge, understanding, and valuing competencies is rejected. The hypothesis that there is no significant difference in the post test of the respondents in terms of knowledge, understanding, and valuing competencies is rejected.

Based on the conclusions of the study, the following recommendations are offered: The teacher may use cooperative learning strategy for the students to develop deeper understanding in content, increase achievement, improve self-esteem and higher motivation on task. The school heads may organize workshops and demonstration teachings where the benefits of cooperative learning strategy will be showcased. Teacher may apply the cooperative learning strategy in teaching lessons not only in *Araling Panlipunan* but also in other subjects. Teacher as facilitator of learning may incorporate varied challenging learning activities in all forms of cooperative learning strategy for the students to experience interesting peer and group interaction and cooperation.

References

Adesoji, F. & Ibraheem, J. (2018). Effects of student teams achievement divisions strategy and mathematics knowledge on learning outcomes in chemical kinetics sosyalarasstermaler.com

Alabekee, E. C. (2015). Effects of traditional instruction, cooperative learning jigsaw II, and cooperative learning student team achievement division (STAD) models on students' learning. https://www.semanticscholar.org

Almoro, D. T. (2009). Cooperative learning approach in English: basis for instructional material preparation. Unpublished Master's Thesis. Pamantasan ng Lungsod ng Maynila, Manila

Aromin, B. G. (2006). Cooperative learning in elementary mathematics V in Tuba and Itogon districts, Benguet division. Unpublished Master's Thesis. Baguio Central University

Asi, E. P. (2011). Cooperative learning strategy in teaching health and Science V at Bitin Elementary School, Bay, Laguna SY 2010-2011

Cabral, A. A. (2015). Jigsaw cooperative learning strategy in teaching and students' performance in Grade 8 Science.

Capedurham College (2010). Numbered Heads Together. https://www.youtube.com

Cororado (2015). Cooperative Learning Strategies. www.colorincolorado.org

Dotson, J.M. (2018). Impact of Cooperative Learning strategy on Grade 7 Mathematics class. https://www.edu

Fernandez, M. L. A. (2011). Cooperative learning lessons to reinforce the teaching of literature. Unpublished Master's Thesis. Mariano Marcos State University, Laoag City

Gillies, R. M. (2007). Cooperative Learning: integrating theory and practice. California: SAGE Publication

Gillies, R. M. (2008). The effects of cooperative learning on junior high school students' behaviors, discourse, and learning during a Science-based learning activity. School Psychology International, 29, 328-347

H. C. (2013). Numbered Heads Together. https://www.pinterest.com/

Ifamuyiwa, S. A. & M. R. Akinsola (2008). Improving senior secondary school students' attitude towards Mathematics through self and cooperative-instructional strategies. Int.J. Math. Educ. Sci. Tech. 39: 569-585

Johnson, D. & R. Johnson (2008). Promoting early adolescents achievement and peer relationships: the effects of cooperative, competitive and individualistic goal structures. Psychological International, 134, 223-246

Kolawole, E. B (2007). Effects of competitive and cooperative strategies on academic performance of Nigerian students in Mathematics. Institute of Education, Faculty of Education, University of Adop-Ekiti, Ekiti State, Nigeria.

Loh, W. I. (2018). The teacher's source book for cooperative learning: practical techniques. Cobee.com.sg

Parveen, Q. &S. Batool (2011). Effect of cooperative learning on achievement of students in General Science at secondary level. International Education Studies Vol. 5, No. 2 April 2012

Parveen, S. (2010). Effect of cooperative learning on academic achievement in the subject social studies. International Journal of Academic Research, Vol. 3, No. 1 pp. 950-955

Shimazoe, J. & H. Adrich (2010). Group work can be gratifying: understanding and overcoming resistance to cooperative learning. College Teaching, 58: 52-57

Tarim, K. & F. Akdeniz (2008). The effects of cooperative learning on Turkish elementary students' mathematics achievement and attitude towards Mathematics using TAI and STAD methods. Educ. Stud. Math., 67: 77-91

Tubis, A. O. (2009). Cooperative learning- its effect on the word problem and social skills in mathematics. Unpublished Master's Thesis. Mariano Marcos State University, Laoag City

Van Wyk, M. (2017). The effects of STAD cooperative learning method in students achievement, attitude and motivation in economics division.www.tanfonline.com

Wright, W. (2015). Foundations for teaching English language learners: Research, Theory, Policy and Practice. Philadelphia, PA: Casion Inc.

Zakaria, E., L.C. Chin, & Y. Daud (2010). The effects of cooperative learning on students' mathematics achievement and attitude towards Mathematics. Journal of Sciences ISSN 1549-3652 p. 272-275

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