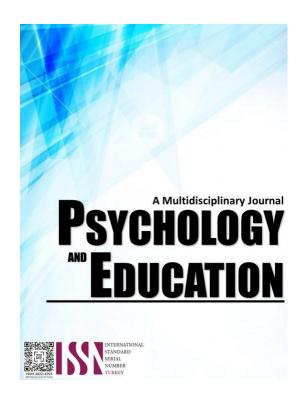
COOPERATIVE LEARNING AND THE GRAMMATICAL COMPETENCE OF STUDENTS



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Cooperative Learning and the Grammatical Competence of Students

Bong B. Lumabao*
For affiliations and correspondence, see the last page.

Abstract

This quantitative study aimed to determine the effects of using a quasi-experimental method using pre-test – post-test with one group design was used in this study, which identified the scores of the students in four grammar area tests before and after the use of cooperative learning activities. The four areas were pronoun-antecedent agreement, subject-verb agreement, tenses of verbs, and voices of verbs. The students' mean pre-test and post-test scores were then compared to determine significant improvement in the student's competency. Cooperative learning activities were then constructed as research output. Findings show that prior to the use of cooperative learning activities, the student's competencies in three areas were found to be fair. These were on the pronoun-antecedent agreement, tenses of verbs, and voices of verbs. Only in the area of subject-verb agreement was the students' competency found to be poor. After the use of cooperative learning activities, the students' competencies were found to be satisfactory in all areas of the grammar test. There were significant differences in the mean pre- test and post-test scores of the students in all areas of the grammar test. The computed t-values imply significant improvement in the students' competencies after the use of cooperative learning activities. Conclusion and recommendations were given.

Keywords: activity, quasi-experimental method, cooperative learning, students' competency, grammatical test

Introduction

Cooperative learning as proposed by Dr. Spencer Kagan (1994) is an approach that primarily aims to develop the cognitive, affective, social and language skills of the learners through the structured based activities. These structured based activities emphasize the increase of students' interpersonal skills, equality, self-respect and content formation. Accordingly, this method stresses out the PIES - Positive interdependence, Individual accountability, Equal participation and Simultaneous interaction. These activities could also be known as the Cooperative learning activities which aim for the optimum integration of communicative competence in view of the fact that interacting with others requires intensive and extensive communication skills to fully understand and analyze the content of the input and output being processed.

Communicative competence highlights the transmitting and constructing of ideas and principles through interrelating of one's self to others with ample confidence and responsibilities. This systematic conceptualization depends on the cooperation of the participants who will actualize and contextualize the learning experience entity. This process of learning introduces teamwork rather than individualism in acquiring a specific linguistic content.

One of the aspects of communicative competence is the grammatical competence. This kind of competence embodies the structure and formation of grammar rules in a language. This includes the morpho - syntactic elements of a language. The relationship between these elements gives clarity on the organization of the sentence. When an organization of a sentence is defective, the sentence accuracy will be affected and later, the semantic elements. It is imperative for an English language speaker to consider this to prevent flaws from communicating particularly in making meanings.

In STI College Cotabato, one of the observed problems among its students is deficiency in the English grammar. This observation is particularly manifested in the written papers like thesis proposals that the students submit to their teachers for checking and editing. During the language teachers' conference, it is always noted that the common problem with the papers of the students is not the content but errors in grammar. This grammar deficiency prevents the students from effective expression of idea in English.

Moreover, what makes the problem more serious and alarming is the fact that the errors are reflected in the use of basic aspects of grammar such as the pronounantecedent agreement, subject-verb agreement, tenses of verbs and voices of verbs.

This issue causes concern for language teachers in STI College Cotabato. It likewise brings to their attention the kind of English teaching they practice and the need to improve the students' grammatical competence.

Bong B. Lumabao 123/132



This view is to consider the fact as well that the institution is highly technological and technical in nature making high grammatical competency a requisite if STI College aims to produce quality graduates. It is in this premise that the researcher finds this study important.

Research Questions

The study aimed to determine the effects of using cooperative learning activities to students' grammatical competence. Specifically, it sought answers to the following questions:

- 1. What are the Pre Test grammatical scores of the students in terms of:
 - 1.1 Pronoun antecedent agreement;
 - 1.2 Subject verb agreement;
 - 1.3 Tenses of Verbs; and
 - 1.4 Voices of verbs?
- 2. What are the Post- Test grammatical scores of the students in terms of:
 - 2.1 Pronoun antecedent agreement;
 - 2.2 Subject verb agreement;
 - 2.3 Tenses of Verbs; and
 - 2.4 Voices of verbs?
- 3. Is there a significant difference between the Pre Test and Post Test scores of the students in each grammar test area?
- 4. What instructional plans can be designed based on the findings of the study?

Methodology

Research Design

The researcher utilized quasi — experimental method using pre — test — post — test one group design. A group of students underwent the pre — test in four grammar areas. An intervention was conducted before the post — test was administered. This was done to find out the significant difference of the pre — test and post — test grammatical scores after the intervention. The result of the study was used as basis in designing instructional plans which aim to enhance students' grammatical competence.

Locale of the study

The study was conducted during the second semester of the school year 2012 - 2013 at STI College Cotabato which is located at Alejandro Dorotheo

Street, Cotabato City. The school offers four year courses namely: Bachelor of Science in Information Technology (BSIT), Bachelor of Science in Computer Science (BSCS), Bachelor of Science in Computer Engineering (BSCOE), Bachelor of Science in Hotel and Restaurant Management (BSHRM), and Bachelor in Science in Tourism (BSTM). It also offers two – year courses like Associate in Computer Technology (ACT) and Hospitality and Restaurant Services (HRS).

STI College Cotabato, being a computer institution, considers Bachelor of Science in Information Technology (BSIT) as its flagship course. It focuses on communication and technology, and business. This program provides students with in-depth knowledge in systems analysis and design, computer programming, database development, network technology, web technology and project planning.

The school has also been known as being the top eight STI branch out of the 100 STI branches nationwide in terms of the number of enrollees. STI College Cotabato has also an Annex building which is located at Don Rufino, Alonzo Street, Cotabato City.

The Respondents of the Study

The first year Bachelor of Science in Information Technology (BSIT) students of STI College Cotabato who were enrolled in Comarts 1 during the second semester of the school year 2012-2013 under the FF101P class were used as the respondents of the study.

Research Instruments

A 100 item sentence completion type of test which covered the grammatical competence was utilized as instrument of the study. This instrument was used in the Pre and Post tests. The test was composed of four grammar areas: pronoun-antecedent agreement – 25 items; subject – verb agreement – 25 items; tenses of verbs – 25 items; and voices of verbs – 25 items. Before the test was administered, a group of language teachers including the adviser of the researcher evaluated the validity of the test in terms of the identified grammar areas. The items were adapted from

http://www.colleges.com/admissions/essays/lf_verbten se.html,%20http:%20//www.act.org/standard/instruct/p df/EXPL_CRS_MatchtoItemsBooklet.pdf,%20retrieve d%20on%20December%2010,%202012,%20http:%20 //www.act.org/qualitycore/pdf/QC_and_CRS_Summar y.pdf%20retrieved%20on%20December%2010,2012 as well as the ELP English Workbook by Jonathan



Malicsi (2003). Lesson guides used in the intervention were likewise constructed. The lesson plans of Torres (2009) in his study "Effects of the Communicative Language Approach and the Use of Multi-media on the Students' Grammatical Competence" were used by the researcher as references to come up with the lesson guides integrating cooperative learning activities. These were also checked by the adviser together with the other language teachers.

Data Gathering Procedures

A letter of permission was sent to the Executive Vice President of STI College Cotabato thru the Academic Head to allow the researcher conduct the study in the said institution. The letter identified the respondents of the study. Five (5) weeks or 10 days were allotted for the class meetings. The class met one and a half hour (4:00 - 5:30 p.m.) every Monday and Wednesday only. The first week included the introduction of the subject, getting-to-know activity, expectation checking and the pretest. The students' scores in the pre-test were immediately collected, checked and recorded. The following weeks covered the conduct of the lessons using cooperative learning activities. After the intervention, the post-test was administered to the students. The pre-test and posttest scores were compared to determine the mean gains. The mean gain scores of the students were computed and analyzed to determine if there were significant differences between the pre-test and post-test scores of the students in the identified grammar areas.

Results and Discussion

The data gathered are presented in this chapter. Together with the presentation of the gathered data are the corresponding analysis and interpretation.

The Students' Pre-test Scores

The succeeding tables show the grammatical competencies of the students in the different grammar areas before the use of cooperative learning activities. The grammatical competencies included the pronounantecedent agreement, subject-verb agreement, tense of verbs, and voice of verbs.

Pronoun-Antecedent Agreement

Table 1 on the next page is the distribution of the students' pre-test scores in the pronoun-antecedent agreement competency test. The test on the pronoun-antecedent agreement was the first part of the pretest.

The test covered the lessons about the rules in pronoun-antecedent agreement. It was a 25 item multiple-choice type of competency test. The respondents were asked to circle the letter that corresponds to the correct answers.

As seen in the table, only one (1) student obtained a score ranging from 21 to 25. This constitutes 3.71% of the students. This means that only 3.71% of the students obtained Very Satisfactory scores. The table further shows that five (5) or 18.52% of the students had scores ranging from 16 to 20. These students had satisfactory scores.

Table 1. The Frequency Distribution of the Students' Pre-test Scores in the Pronoun-Antecedent Agreement

| Scores | f | % | Description |
|---------------|-------|----------------|-------------------|
| 21-25 | 1 | 3.71 | Very Satisfactory |
| 16-20 | 5 | 18.52 | Satisfactory |
| 11-15 | 8 | 29.63 | Fair |
| 6-10 | 9 | 33.33 | Poor |
| 0-5 | 4 | 14.81 | Very Poor |
| Total | 27 | 100 | |
| Mean Score: | 11.15 | Perfect Score: | 25 |
| Highest Score | 21 | Lowest Score | ٥ |

| Range | of Sco | res | Description |
|-------|----------|--------------|--------------------|
| 21 | - | 25 | Very Satisfactory |
| 16 | - | 20 | Satisfactory |
| 11 | - | 15 | Fair |
| 6 | - | 10 | Poor |
| 0 | - | 5 | Very Poor |
| | 21 16 | 21 - 16 - | 16 - 20 11 - 15 |

There were nine students (9) or 33.33% whose scores were fair. Their scores range from the 11 to 15. Nine (9) or 33.33% of the students had poor scores ranging from 6 to 10; and four (4) or 14.81% had 5 and below which was described very poor.

The highest score obtained was twenty one while the lowest score was zero (0). The obtained mean score is 11.15 described as fair. The data may imply that the students lack mastery of rules governing the pronoun and its antecedent agreement. Students' scores seem to reflect their inadequacy in determining the relationship of the pronoun with its referent in terms of number, person and gender. However, the scores do not point specific reason behind this inadequacy. Nevertheless, teachers' teaching strategies are not ruled out as a possibility considering that this topic is considered basic in language competency development.

Subject-Verb Agreement

Displayed in Table 2 on the next page is the distribution of the students' pre-test scores in the



subject –verb agreement competency test. The test on the subject-verb agreement was the second part of the pretest. The test covered the lessons about the rules in subject-verb agreement. It was a 25 item completion type of competency test. The respondents were asked to give the correct form of the verb in the parenthesis. Their answers were written on the space provided in each item.

There were three (3) or 11.11% students who obtained satisfactory scores ranging from 16 to 20. Ten (10) or 37.04% had fair scores ranging from 11 to 15. Nine students (9) or 33.33% had poor scores ranging from 6 to 10; and five (5) or 18.52% scored between 0-5 which is described as very poor.

Table 2. The Frequency Distribution of the Students' Pre-test Scores in Subject-Verb Agreement

| Scores | .f | % | Description |
|----------------|-------|---------------|-------------------|
| 21-25 | 0 | 0.00 | Very Satisfactory |
| 16-20 | 3 | 11.00 | Satisfactory |
| 11-15 | 10 | 37.04 | Fair |
| 6-10 | 9 | 33.33 | Poor |
| 0-5 | 5 | 18.52 | Very Poor |
| Total | 27 | 100.00 | • |
| Mean Score: | 10.04 | Perfect Score | : 25 |
| Highest Score: | 18 | Lowest Score | e: 0 |

The highest score obtained is 18 out of the perfect score. The lowest score is zero (0). The mean score obtained was 10.04 or 40.16% of the perfect score. This mean score is described as poor. This implies that before the use of cooperative learning activities, the students' competence in the agreement between the subject and the verb of the sentence was poor. This low grammatical competence of the students confirms the study of Lares (2006) as cited by Torres (2009) stating that one of the common grammatical errors of the students is in subject-verb agreement.

This finding indicates that the students had deficiency in either mastering or applying the rules on subject-verb agreement or that they do not actually know the singular as well as the plural forms of the subject and the verb of the sentence. This further means that the students really lack grammatical competence. Subject-verb agreement is among the most basic but very important aspect of grammar. The topic is introduced as early as the grade school but why the incompetency among the students? This indeed, is a concern to look into in language teaching for it is only in being able to master the function of the subject and the verb that one can effectively express his thoughts at least in a sentence.

Tenses of Verbs

The next table shows the result of the students' scores on the third part of the pre-test given. This part was in verb tenses which covered the simple tenses, progressive tenses and the perfect tenses. This part contained 25 items.

Table 3. The Frequency Distribution of the Students' Pre-test Scores in the Tenses of Verbs

| Scores | .f | % | Description |
|----------------|-------|----------------|-------------------|
| 21-25 | 0 | 0.00 | Very Satisfactory |
| 16-20 | 5 | 18.52 | Satisfactory |
| 11-15 | 9 | 33.33 | Fair |
| 6-10 | 8 | 29.63 | Poor |
| 0-5 | 5 | 18.52 | Very Poor |
| Total | 27 | 100.00 | |
| Mean Score: | 10.59 | Perfect Score: | 25 |
| Highest Score: | 18 | Lowest Score: | 0 |

As gleaned in the table, none of the students scored between 21 to 25. There were five (5) or 18.52% who obtained satisfactory scores ranging from 16 to 20. Nine (9) or 33.33% scored between 11-15 which was described as fair; 8 or 29.63% scored between 6-10 which was described as poor and 5 or 18.52% scored between 0-5 which was described as very poor.

The highest score obtained was 18 while the lowest score was zero. The obtained mean score is found to be 10.59. This score corresponds to 42.37% of the perfect score and with a description of fair. The test in tenses of verbs aimed to measure the competency of the students in using correct verb form in reference to the time the action stated in the sentence actually happened or occurred. This result affirms the finding in the study of Lares (2006) as cited by Torres (2009) stating that one of the common grammatical errors of the students apart from the subject verb-agreement is the identification of verb tenses. This also supports the contention of Kelim (2003) as cited by Torres (2009) that freshmen students commonly commit errors on consistency of tense of verbs in making sentences or paragraphs. Errors in verb tenses are among the most glaring grammatical incompetency of Filipino students. Looking at the conventional method in teaching grammar, this topic is also identified to be less exciting and enjoyable. Thus, this finding seems to suggest that there is a need to make grammar teaching more meaningful and fun.

Voices of Verb

Table 4 below shows the students' scores in the fourth

Bong B. Lumabao 126/132



part of the pre-test. This 25 item part dealt with the voices of verbs. The test was a Multiple-Choice type.

Table 4. The Frequency Distribution of the Students' Pre-test Scores in the Voice of Verbs

| Scores | f | % | Description |
|----------------|-------|----------------|-------------------|
| 21-25 | 5 | 18.52 | Very Satisfactory |
| 16-20 | 8 | 29.63 | Satisfactory |
| 11-15 | 8 | 29.63 | Fair |
| 6-10 | 3 | 11.11 | Poor |
| 0-5 | 3 | 11.11 | Very Poor |
| Total | 27 | 100.00 | |
| Mean Score: | 14.67 | Perfect Score: | 25 |
| Highest Score: | 22 | Lowest Score: | 0 |

As shown in the Table 4, there were five or 18.52% who had very satisfactory scores ranging from 21 to 25. Eight (8) or 29.63% had scores ranging from 16 to 10. The scores were described as satisfactory. There were also eight (8) or 29.63% who scored between 11 to 15 and were described as fair. Three (3) or 11.11% obtained scores ranging from 6 to 10; and another three (3) or 11.11% had scores of 5 and below. The scores were described as poor and very poor respectively.

The highest score was 22 or 88.00% of the perfect score. The lowest score obtained was zero. The students' mean score is computed to be 14.67 which is described as fair.

The data in the table further shows that the students had low grammatical performance in the pre-test in voice of verbs as shown by the mean score of 14.67. This result is in consistent with the result of the study of Kelim (2006) as cited by Torres (2009) that in addition to tenses, students also commit common errors in voice when they construct sentences or paragraphs. This grammar aspect makes the students identify whether the subject of the sentence is the doer or the receiver of the action. Obviously, the students experienced real difficulty in dealing with this topic. Moreover, the researcher does not rule out the possibility that the teaching process and the limitations of the instrument used in this study could also have affected the students' scores.

The summary of the Students' Pre-test Scores

Table 5 on the next table presents the summary of the students' pre-test grammatical competence mean scores and the computed standard deviation on the four areas as follow: pronoun-antecedent agreement, subject-verb agreement, tenses of verbs, and voices of verbs.

Table 5. The Summary of the Students' Pre-test Scores in the Grammatical Competency Test

| | Areas | | Mean | SD |
|-------------------|------------------|--------|-------|-------------------|
| Pronous | n-Antece nent | edent | 11.15 | 6.61 |
| Subject Agreen | | | 10.04 | 11.76 |
| | Tense of Verbs | | 10.59 | 5 |
| Tense o | f Verbs | | 14.67 | 10.05 |
| Legend: | Ranges | of the | Mean | Description |
| | 0.00 | - | 5.49 | Very Poor |
| | 5.50 | - | 10.49 | Poor |
| | 10.50 | - | 15.49 | Fair |
| | 11.50 | - | 20.49 | Satisfactory |
| | 20.50 | - | 25.00 | Very Satisfactory |

As shown in the table, the grammatical area with the highest mean score was the voice of verbs as indicated by 14.67. This was followed by the pronounantecedent agreement with a mean score of 11.15. Following next was tense of verbs with a mean of 10.59. Subject-verb agreement got the lowest mean score as indicated by 10.05.

The data show that before the intervention using the cooperative learning activities was done, the grammatical competencies of the students was generally described as Fair.

This finding seems to suggest that the students had insufficient background on the particular grammar topics. This result agrees with the study conducted by Lares (2006) as cited by Torres (2009) revealing that out of 3,077 sentences constructed from the research instrument, the errors committed by the students in writing skills arranged and ranked from highest to lowest are as follow: (a) tenses, (b) pronounantecedent agreement, (c) subject-verb agreement, (d) preposition, (e) spelling, and (f) punctuation.

The Students' Post Test Scores

The students' grammatical competencies after the use of Cooperative Learning activities are presented in this section. These competencies are indicated by their post-test scores in the areas of pronoun-antecedent agreement, subject-verb agreement, tenses of verbs and voices of verbs tests.

Pronoun-Antecedent Agreement

Table 6 on the next page displays the students' posttest scores in the pronoun-antecedent area. This grammar area was part 2 of the whole grammatical



competency test. The test was in multiple choice type containing 25 items. The scores reflected in the table indicate the students' competency in pronounantecedent after the intervention using the cooperative learning activities.

Table 6. The Frequency Distribution of the Students' Post-test Scores in the Pronoun-Antecedent Agreement

| Scores | f | % | Description |
|----------------|-------|---------------|-------------------|
| 21-25 | 12 | 44.44 | Very Satisfactory |
| 16-20 | 9 | 33.33 | Satisfactory |
| 11-15 | 5 | 18.82 | Fair |
| 6-10 | 1 | 3.71 | Poor |
| 0-5 | 0 | 0.00 | Very Poor |
| Total | 27 | 100.00 | • |
| Mean Score: | 18.93 | Perfect Score | e: 25 |
| Highest Score: | 24 | Lowest Scor | e: 9 |

As shown in the table, out of 27 students, 12 or 44.44% scored within the range of 21-25; 9 scored within the range of 16-20; 5 scored within the range 11-15; 1 scored 9; and none scored lower than the range 6-10.

The data imply that almost half of the students got very satisfactory scores in their post test in pronounantecedent area as indicated by 12 students who scored within the range 21 - 25. The figure is followed by nine students who scored satisfactorily; 5 students scored fairly and 1 still scored poorly as indicated by the score of 9 as the lowest.

These data imply further that after the intervention was conducted, the students gained improvements in their scores. This suggests that cooperative learning activities were effective aids in enhancing the students' grammatical competency.

This result supports the idea of Johnson and Johnson (1999) that cooperative learning methods produce positive achievements or results compared to individualistic or competitive methods of learning.

Subject-Verb Agreement

Displayed in Table 7 below is the frequency distribution of the students' post-test scores in subject-verb agreement area.

Table 7. The Frequency Distribution of the Students' Post-test Scores in the Subject-Verb Agreement

| Scores | f | % | Description |
|----------------|-------|----------------|-------------------|
| 21-25 | 12 | 44.44 | Very Satisfactory |
| 16-20 | 7 | 25.93 | Satisfactory |
| 11-15 | 7 | 25.93 | Fair |
| 6-10 | 1 | 3.70 | Poor |
| 0-5 | 0 | 0.00 | Very Poor |
| Total | 27 | 100.00 | |
| Mean Score: | 18.56 | Perfect Score: | 25 |
| Highest Score: | 24 | Lowest Score: | 9 |

As seen in the table, there were 12 of the 27 students who scored within the range of 21-25. The scores were described very satisfactorily. 7 students scored within the range of 16-20; 7 scored within 11-15 range and 1 got the lowest score of 9.

The table reflects that 44.44% of the students got very satisfactory scores after the intervention. 25% of them got satisfactory scores; 25.93% got fair scores and 3.70% got a poor score.

These data indicate an improvement of the students' scores in their grammatical competence tests from the poor mean score description in the pre-test to the satisfactory mean score description in the post-test.

This finding seems to suggest that the use of cooperative learning activities as intervening factors in teaching subject-verb agreement was effective. The same finding may also mean that the students' scores improved because there was a reinforcement of the lessons in the identified grammar area before the post-test was given. Thus, the students' prior knowledge about the topic was activated which contributed to better test performance.

Tenses of Verbs

Displayed in Table 8 on the next page are the post-test scores of the students in the tenses of verbs competency test. The test was composed of 25 items on simple, progressive and perfect tenses. The test items were in multiple choice-type.

Table 8. The Frequency Distribution of the Students' Post-test Scores in the Tenses of the Verb

| Scores | .f | % | Description |
|----------------|-------|--------------|-------------------|
| 21-25 | 8 | 29.63 | Very Satisfactory |
| 16-20 | 12 | 44.44 | Satisfactory |
| 11-15 | 6 | 22.22 | Fair |
| 6-10 | 1 | 3.71 | Poor |
| 0-5 | 0 | 0.00 | Very Poor |
| Total | 27 | 100.00 | |
| Mean Score: | 18.00 | Perfect Scor | re: 25 |
| Highest Score: | 24 | Lowest Scor | re: 10 |



As reflected in the table, 8 out of 27 students or 29.63% scored within the range of 21-25. The scores were described as very satisfactory. 12 or 44.44% scored within the range of 16-20 and the scores were described as fair. Only 1 or 3.71% of the 27 students scored 10 which was described as poor.

The table shows that after the use of cooperative learning activities, the students' scores in the verb tenses improved. This result agrees with the study of Johnson, et. Al (1981) which concluded that cooperative learning has significant effects in promoting students' achievement.

Voices of Verb

Table 9 below shows the post-test scores of the students in the voices of verbs area of grammar competency. The test was composed of 25 items covering the active and the passive voices of verbs.

Table 9. The Frequency Distribution of the Students' Post-test Scores in the Voices of the Verbs

| Scores | f | % | Description |
|----------------|-------|--------------|-------------------|
| 21-25 | 7 | 25.93 | Very Satisfactory |
| 16-20 | 17 | 62.96 | Satisfactory |
| 11-15 | 3 | 11.11 | Fair |
| 6-10 | 0 | 0.00 | Poor |
| 0-5 | 0 | 0.00 | Very Poor |
| Total | 27 | 100.00 | • |
| Mean Score: | 18.74 | Perfect Scor | re: 25 |
| Highest Score: | 24 | Lowest Scor | re: 14 |

As reflected, none from the 27 students scored below the range of 11-15. The lowest score was 14 and only 3 students got the scores which were described as fair. 17 students scored within the range of 16-20. The scores were described as satisfactory. 7 students scored within the range of 21-25 and the scores were described as very satisfactory.

The data in this table suggest an improvement in the scores of the students from the fair description of the mean score in the pre-test to satisfactory mean score description in the post test. These data also implies that the use of cooperative learning activities in teaching grammar particularly the voice of verbs helps improve the grammatical competency of the students. Thus, the finding affirms Kagan's (1994) claim that the academic achievement has been increased among those who have used cooperative learning.

The summary of the Students' Post-test Scores

Table 10 below presents the summary of the students' post-test mean scores and the standard deviation on the four grammatical competency areas.

Table 10. The Summary of the Students' Post-test in the Grammatical Competency Test

| | Areas | | Mean | SD | Description |
|-------------------|------------------|--------|-------|-------|-------------------|
| Pronou | n-Antece nent | dent | 18.81 | 10.20 | Satisfactory |
| Subject Agreen | | | 18.56 | 10.53 | Satisfactory |
| Tense o | f Verbs | | 18.00 | 9.36 | Satisfactory |
| Tense o | f Verbs | | 18.74 | 9.73 | Satisfactory |
| Legend: | Ranges | of the | Mean | | Description |
| | 0.00 | - | 5.49 |) | Very Poor |
| | 5.50 | - | 10.4 | 19 | Poor |
| | 10.50 | - | 15.4 | 19 | Fair |
| | 11.50 | - | 20.4 | 19 | Satisfactory |
| | 20.50 | - | 25.0 | 00 | Very Satisfactory |

As displayed in the table, all four competency areas had mean scores which were described as satisfactory. The mean scores are broken down as follow: pronounantecedent agreement had a mean score of 18.81; subject-verb agreement had 18.56; tenses of verbs had 18.00; and voices of verbs had 18.74

All data in Table 10 showed that the students generally scored satisfactorily in all grammatical competency areas. The data seem to suggest that the improved competency was obtained after the use of cooperative learning activities. This finding is consistent with the finding in the study of Humphreys et. al. (1982), that the students learn and retain significantly more information through the use of cooperative methods.

The Relationship between the Pre-test and the Posttest Scores

One of the main objectives of this study is to find out if there is a significant difference on the mean gain scores of the students on the pre-test and post-test given.

Table 11 on the next page shows the comparison of the students' pre-test and post-test scores. The corresponding t-value is also indicated.

As shown in the table, the students' mean pre-test score in the area of the pronoun-antecedent agreement is 11.15. The mean post-test score is indicated to be 18.93. The computed value of t is shown to be 5.807. This value is described to be significant at 0.05 level of significance. This means that the students' mean



post-test score in the area of pronoun-antecedent agreement is significantly higher than the mean pretest score. This implies that the students' competency in this area had significant improvement after the use of cooperative learning activities.

Table 11. The Students' Mean Pre-test and Post-test Scores in the Grammatical Competency Test and the Corresponding t-value

| Areas | Mean Pre-test Score | Mean Post-test Score | t-value |
|---------------------------------|------------------------|-------------------------|-----------|
| Pronoun-Antecedent Agreement | 11.15 | 18.93 | 5.807 (S) |
| Subject-Verb Agreement | 10.04 | 18.56 | 6.715 (S) |
| Tense of Verbs | 10.59 | 18.00 | 5.868 (S) |
| Tense of Verbs | 14.67 | 18.74 | 3.071 (S) |

t to be significant at df = 52, one-tailed and at 0.05 level of significance should be at least 1.678

In the subject-verb agreement area, the computed t-value of 6.715 indicated significant difference between the 10.04 mean pre-test score and the 18.56 mean post-test score. This appears that after the use of cooperative learning activities, the students' competency in subject-verb agreement area improved significantly.

On tenses of verbs, the students' mean pre-test score is 10.59 while their mean post-test score is 18.00. The t-value of 5.868 shows that students' mean post-test score is significantly higher than their mean pre-test score.

The table also shows that the students mean pre-test score in the voices of verbs is 14.67 while their mean post-test score is 18.74. The computed t-value of 3.071 also indicates significant difference between the two scores. Hence, the students' competency in this area also improved.

The data in Table 11 reveal that in all areas of the grammatical competency test, the students' competencies significantly improved. The significant difference in the students' competencies was manifested after the use of cooperative learning activities. Thus, the null hypothesis is rejected.

Since the result reveals difference between the mean pre – test scores and mean post – test scores, this means that the cooperative learning activities can be an effective tool to improve students' performance. The obtained t-values were all significant implying significant improvements on the learning of the students in the different grammar lessons. This result supports the study of Kelim (2003) as cited by Torres

(2009) which stated that students had better understanding of the lessons when exposed to communicative exercises. Moreover, the result seems to suggest that the use of cooperative learning activities activated the students' appreciation of the grammar lessons as well as their participation in their class activities.

Conclusion

Based on the summary of findings, following conclusions were drawn:

The grammatical competence of the students had improved. This improvement was indicated by the significant difference in their pre-test and post-test mean scores. Subject-verb agreement had the highest mean gain score followed by tenses of verbs. On the other hand, voices of verbs had the lowest mean gain score. The significant differences maybe attributed to the treatment which was the use of cooperative learning activities. This result supported the study of Kelim (2003) as cited by Torres (2009) which concluded that students had better understanding of the lesson when exposed to communicative exercises. Moreover, the students showed better interest and class participation when they were given the opportunity to work with their peers during classroom activities.

Based on the findings and conclusions, the following recommendations are posed: (1) The use of cooperative learning activities could be considered as primal tool in teaching grammar. (2) The administrator of STI College Cotabato should conduct seminar, trainings and workshops to the faculty members with emphasis in the use of cooperative learning. (3) A learning guide integrating cooperative learning activities must be developed by the language department of STI College Cotabato and be used particularly in teaching basic English courses. (4) Further researches could be conducted using other fields of disciplines and method of research to validate the reliability and effectiveness of the cooperative learning in the totality of the teaching - learning process.

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Bong B. Lumabao 130/132



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Affiliations and Corresponding Information

Bong B. Lumabao, LPT, PhD

ILMO (Innovative Learning Management Operations) Inc.-Philippines