

## Developing Linguistic Competence and Critical Thinking Skills Through Cooperative Learning: An Assessment

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**ABSTRACT** *This study aimed to assess the effectiveness of cooperative learning method in developing linguistic competence and critical thinking skills of students. All the subjects were taught lessons using the lecture discussion method and cooperative learning approach alternately. The pseudo-experimental method utilizing the repeated measures design was used in the study. T-test was used to compare the mean scores on the pretest/posttest of achievement tests. The study found out that there is a significant improvement in the linguistic competence and critical thinking skills of students taught with the use of lecture discussion method and cooperative learning. The mean gain scores on cooperative learning approach has significantly improved the linguistic competence and critical thinking skills of students. Findings show that both methods can develop linguistic competence and critical thinking skills of students, but cooperative learning has a higher mean gain score in linguistic competence as compared to the lecture–discussion method. Under linguistic competence, there is a significant difference in the mean gain scores in linguistic competence of subjects taught under cooperative learning but not in lecture-discussion method. Under critical thinking skills, there is no significant difference in the mean gain scores in critical thinking skills between the two groups.*

**KEYWORDS:** cooperative learning, linguistic competence, critical thinking skills

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### INTRODUCTION

Teaching the English language requires innovative strategies. Oxford (1990) observed that language learning strategies in recent years have been shifted in focus from the teacher to the learner. The shift of focus suggests that the success of language learning rests on the learners' ability to fully utilize every opportunity to learn and use the English language.

Language is best acquired when it is used in a way that is meaningful to the student Kagan (1995) believed that language acquisition is fostered by output that is functional and communicative, frequent, redundant, and consistent with the identity of the speaker. Cooperative learning is the ideal situation for communicative output where different skills can be developed. The cooperative learning setting also provides for frequent use of the language. The fact that students are in small group settings allows for much greater opportunities for language use than the traditional classroom.

According to Johnson, D., and Johnson, R.T. (2018), cooperative learning is the foundation on which many of the active learning procedures are based. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. Within cooperative learning, students benefit from sharing ideas rather than working alone. Students help one another so that all can reach some measure of success. This is in contrast with the traditional method where students work individually or competitively. Social interaction plays a very significant role in language teaching and learning. Dunn (2005) emphasized that active methodology in teaching has several advantages. She pointed out that active engagement to an activity and the social context of the environment are of great importance in the learning process.

It is in this context that the researchers want to find out the effects of cooperative learning in developing linguistic competence and critical thinking skills of students.

## **REVIEW OF RELATED LITERATURE**

### **Teaching Strategies and Students' Achievement**

Many researches claim that teaching strategies employed by teachers affect the academic performance of the learners. Students are motivated to actively participate in the teaching- learning process when appropriate strategies are being used by the teacher. These strategies serve as guides for students in order for them to attain their optimal capability as learners. One of the teaching strategies that maximizes student's involvement is cooperative learning. Johnson (2002) explained that cooperative learning uses small groups so that students work together to maximize their own and each other's learning. Any lesson (in any subject area for any age of student) can be done cooperatively.

Some skills that could hardly be developed in the traditional method can be addressed using cooperative learning. Careen (1997) discovered that although all groups showed improvements in oral performance and aural comprehension, cooperative learning benefited weaker and average ability students more than higher ability students. This study compared cooperative learning and traditional classroom methods. The study also showed that students of all levels in the cooperative learning groups acquired significantly more vocabulary than that of the traditional method.

Recent researches confirmed the positive effect of shifting in focus from teacher-centered instruction to student-centered one. Casey and Fernandez-Rio (2019) noted that through the

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cooperative method, students learned to value both their own and others' views and solutions, become highly self-reliant on their own minds and ideas, adapt peer group work to suit their own and others' needs within the classroom, and think of academic success and achievement in terms of contribution than just performance in exams. They also noted an increase in positivity especially self-esteem and motivation in their work. Ehsan, Vida, and Mehdi (2019) concluded that cooperative learning increased student achievement in academics more than the traditional lecture-based system. The students had significantly improved their skills in the topic compared to their counterparts in the traditional lecture-based class. They also realized that student motivation has significantly gone up compared to their counterparts. They also noted that intrinsic motivation came as a result of cooperative learning. The finding that the CL approach was superior to traditional instruction in enhancing learners' intrinsic motivation supports the widely accepted view that CL generates higher levels of intrinsic motivation.

In addition, Lestari et al. (2019) observed a significant difference in the learning outcomes of students who used cooperative learning in mathematics. Mathematics students who used cooperative learning had a higher learning outcome compared to the other students who used conventional learning media.

### **Theoretical Perspectives on Cooperative Learning and Achievement**

Johnson and Johnson (2015) [10] defined and explained the theoretical perspectives that have guided research on and practice of cooperative learning—social interdependence, cognitive-developmental, social-cognitive and behavioral theories.

**Social Interdependence Theory.** This is the most important in terms of research generated and practical applications. Deutsch (1949) defined positive interdependence (i.e., cooperation) as existing when a situation is structured so that individuals' goal achievements are positively correlated; individuals perceive that they can reach their goals if, and only if, the others in the group also reach their goals. Social interdependence exists when individuals share common goals and each individual's outcomes are affected by the actions of the others (Johnson and Johnson 1989).

**Cognitive-Developmental Theory:** This theory is striving to attain common goals while coordinating one's own feelings and perspective with a consciousness of others' feelings and perspective. A central aspect of cooperation according to cognitive-developmental theory is conflict among ideas or controversy. Constructive controversy theory (Johnson and Johnson, 1979, 2007, 2009) posits that being confronted with opposing points of view creates disequilibrium, uncertainty, or conceptual conflict, which creates a search for more information.

**Social Cognitive Theory:** Cooperation is viewed as the shared belief of group members in their collective power to produce desired results. In collective agency individuals work cooperatively to secure what they cannot accomplish on their own. Key behaviors are modeling, coaching, and providing conceptual frameworks that result in understanding of what is being learned. Holt, E.B.

and H.C. Brown (1931) theorized that all animal action is based on fulfilling the psychological needs of "feeling, emotion, and desire". They predicted that a person cannot learn to imitate until they are imitated, and this is the conceptual roots for social cognitive theory.

**Behavioral-learning Theory.** Behavioral learning theories assume that individuals will work hard on those tasks for which they secure a reward and will fail to work on tasks that yield no reward or yield punishment. Cooperative efforts are designed to provide incentives for the members of the group to participate in a group effort since it is assumed that individuals will not intrinsically help their classmates or work toward a common goal. Skinner (1950) concluded that those who are interested in a science of behavior will insist that learning is a change in behavior.

### **Three Theoretical Perspectives**

Authentic social interaction develops students' capabilities to ask questions, elaborate ideas, adjust to others comfort zones. Kauchak and Eggen (2003) elucidated the **three theoretical perspectives** that will explain the influence of social interaction in learning: developmental theory; elaboration theory; and motivational theory.

**Development Theory.** According to Berliner (2008), the theory of Jean Piaget that intellectual ability is qualitatively different at different ages and that children need interaction with the environment to gain intellectual competency has influenced the perspective of education and psychology.

**Elaboration Theory.** Elaboration makes a message lucid to the learner. Slavin (1995) made clear that elaboration makes information meaningful by forming additional links in existing knowledge. The most effective ways to retain new information is to elaborate or restructure it and connect it to what we already know.

**Motivation Theory.** Learning is usually most efficient and rapid when the learner is motivated and attentive. Behavioral studies with both animals and people have shown that one effective way to maintain the learner's motivation is to deliver strong and immediate reinforcers for correct responses. Duttweiler (1986) believed that motivators are the factors that arouse, direct and sustain increased performance.

### **Cooperative Learning and Achievement.**

The different proponents of cooperative learning define vividly the description and discuss clearly the structure of the different cooperative strategies. Ferrer (2008) explained that cooperative learning is an instructional strategy that capitalizes on the energy and coordination of students working in groups. It is clear that everyone shall be involved to maximize the design of this strategy. Johnson and Johnson (2002) expounded that cooperative learning is instructionally using small groups so that students can work together to maximize their own and each other's learning.

Interaction and collaboration are always emphasized and developed when cooperative learning is used in the teaching-learning process. Kagan (1990) claimed that cooperative learning structures

are content-free ways of organizing social interaction in the classroom. He also stresses that in cooperative learning, group work is carefully designed to promote group interdependence and individual responsibility. It provides a chance for skill learning while at the same time teaching responsibility. Corpuz and Salandanan (2007) illustrated that cooperative learning approach makes use of a classroom organization where students work in groups or teams to help each other to learn. In addition, Newby et al. (2006) emphasized that cooperative learning shall involve small groups of students working together to learn collaborative and social skills while working toward a common academic goal or task.

According to Johnson, Johnson, and Stanne (2000), cooperative learning exists when students work together to accomplish shared learning goals. There is broad dissemination of cooperative learning through teacher preparation programs, in-service professional development, and practitioner publications. The widespread use of cooperative learning is due to multiple factors. Cooperative learning is clearly based on theory, validated by research, and operationalized into clear procedures where educators can use.

### **Elements of Cooperative Learning**

Different proponents of cooperative learning try to elucidate the elements of this method. Biehler and Snowman (1997) synthesized the **seven main features** of the cooperative learning approaches.

1. **Group Heterogeneity.** The size of cooperative-learning groups is relatively small and as heterogeneous as circumstances allow. The recommended size is usually four to five students of different ability levels, ethnic backgrounds and social classes.
2. **Group Goals/Positive Interdependence.** A specific goal is identified for the group to attain. Students are told that they will have to support one another because the group goal can be achieved only if each member learns the material being taught.
3. **Promotive Interaction.** This element is made necessary by the existence of positive interdependence. Students are shown how to help each other overcome problems and complete whatever task has been assigned.
4. **Individual Accountability.** This feature stipulates that each member of a group has to make a significant contribution to achieving the group's goal.
5. **Interpersonal Skills.** Positive interdependence and promotive interaction are not likely to occur if students do not know how to make the most of their face-to-face interactions. They have to be taught on skills such as leadership, decision making, trust building, clear communication, and conflict management.
6. **Equal Opportunities for Success.** Because cooperative groups are heterogeneous, their success depends on positive interdependence, promotive interaction and individual accountability. It indicates that all students, regardless of past achievement, have comparable chances to be rewarded for their effort.
7. **Team Competition.** This may seem to be an odd entry in a list of cooperative-learning components, especially in light of the comments we made earlier about the ineffectiveness of competition as a spur to motivation.

Baloche, L. and Brody, C. (2017) claimed that implementing cooperative learning in classrooms has always been a challenge. Any educator who has ever used small groups for learning knows that merely placing pupils in groups and telling them to work together does not ensure quality cooperation or learning. Even establishing positive social interdependence, structuring a shared goal and providing some instruction in ‘how’ to work together are unlikely to be enough.

### **Linguistic Competence and Cooperative Learning**

Linguistic competence is a term that was introduced by Chomsky. According to Chomsky (1965), linguistic competence is people’s knowledge of language (grammar, syntax, vocabulary) while linguistic performance is using the knowledge in language in real situations. Linguistic competence is identifying the correct grammar, syntax, and vocabulary of a language. Linguistic competence asks: What words do I use? How do I put them into phrases and sentences? Venema (2002) [29] clarified and explained that linguistic competence has been used to describe the multi-faceted skills required for the effective use of language.

Linguistic competence has long been the desired outcome of second language classrooms. Many researches, such as that done by Kasanga (1996) [30], Pica, Lincoln-Porter, Paninos, and Linnell (1996), and Salaberry (1997), have shown that as opportunities to use the language in meaningful situations increases, so does the acquisition of the second language. Kagan (1995), claimed that language acquisition is fostered by output that is functional and communicative, frequent, redundant, and consistent with the identity of the speaker. Cooperative learning is the ideal situation for communicative output. Language is best acquired when it is used in a way that is meaningful to the student. Cooperative learning provides opportunities for students to express themselves in a functional manner which is personally relevant to them. Students are using the language for a specific purpose, usually to meet certain group goals.

### **Critical Thinking Skills and Cooperative Learning**

#### **Critical Thinking**

The need to develop critical thinking is indispensable especially in this fast –paced world. Students should be equipped with the necessary skills that make them wise and responsible citizens. Scriven and Paul (2000) defined critical thinking as the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication as a guide to belief and action.

Further, Chan and Lau (2009) defined critical thinking as the ability to think clearly and rationally. It includes the ability to engage in reflective and independent thinking. They added that there are several reasons of studying critical thinking. First, critical thinking is a domain-general thinking skill. It enhances language and presentation skills. Thinking clearly and systematically can improve the way we express our ideas. Second, critical thinking promotes creativity. To come up with a creative solution to a problem involves not just having new ideas, but also useful and



relevant to the task at hand. Last, critical thinking is crucial for self-reflection. In order to live a meaningful life and to structure our lives accordingly, we need to justify and reflect on our values and decisions.

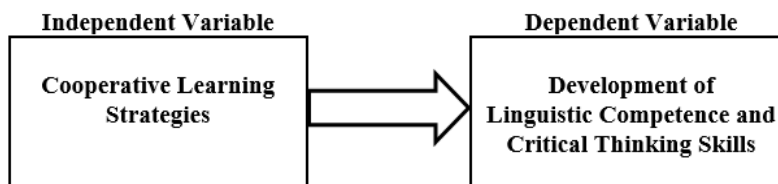
Watson, G., & Glaser, E. M. (1980) stated that critical thinking is a composite of attitudes, knowledge and skills. This composite includes: 1. Attitudes of inquiry that involve an ability to recognize the existence of problems and an acceptance of the general need for evidence in support of what is asserted to be true; 2. Knowledge of the nature of valid inferences, abstractions, and generalizations in which the weight or accuracy of different kinds of evidence are logically determined; and 3. Skills in employing and applying the above attitudes and knowledge.

Based on the different literatures, cooperative learning is an appropriate approach in teaching and developing linguistic competence and critical thinking skills of students.

## METHODOLOGY AND PROCEDURES

This part presents the research paradigm, research objectives, research methodology, research respondents and instruments used in the study.

### Research Paradigm



### Research Objectives

General Objective: This study aimed to identify the effects of cooperative learning strategies in developing **linguistic competence** of college students, and **critical thinking skills** of secondary school students.

Specifically, it sought to answer the following questions:

1. How effective is **cooperative learning** in developing **linguistic competence** of students as compared to the traditional lecture discussion method?
2. How effective is **cooperative learning** in developing **critical thinking skills** of students as compared to the traditional lecture discussion method?

### Research Hypotheses

The following hypotheses were tested:

1. There is no significant difference in the pretest and posttest **mean scores** in linguistic competence of subjects taught under lecture discussion method and cooperative learning approach.

2. There is no significant difference in the pretest and posttest **mean gain scores** in linguistic competence of both groups of subjects taught under the two methods of instruction.
3. There is no significant difference in the pretest and posttest **mean scores** in critical thinking skills of subjects taught under lecture discussion method and cooperative learning approach.
4. There is no significant difference in the pretest and posttest **mean gain scores** in critical thinking skills of both groups of subjects taught under the two methods of instruction.

## RESEARCH METHODOLOGY

This study aimed to identify the effects of cooperative learning strategies in developing linguistic competence and critical thinking skills students. This research used the pseudo-experimental method using the repeated measures design. T-test was used to compare the mean scores on the pretest/posttest of achievement tests. Descriptive statistics like frequency counts, percentages, means, standard deviation, and weighted mean were used to analyze data to answer descriptive questions.

### Respondents and Research Instruments

The subjects for the **linguistic competence** were taken from the two sections of first year college students who were enrolled in English 12- Grammar and Composition 2 at the Cagayan State University, College of Education, Tuguegarao City, Philippines. Each section has fifty students, and all of them were taken as subjects. All students in each section were included in all activities, and subjected to data gathering. The subjects for the **critical thinking skills** were taken from two sections (115 students) of second year high school students at Andarayan National High School, Solana, Cagayan, Philippines. All of them were taken as subjects who were taught lessons using the lecture discussion method and cooperative learning approach alternately. The respondents came from different levels because the researchers are from different levels- secondary and tertiary. The researchers have different interests (lessons, topics), but they both wanted to discover the impact of cooperative learning in different levels and different lessons for future references.

There were two instruments administered to the samples. The first instrument is the “linguistic competence test” designed to assess competence of subjects on fragments, run-ons, misplaced modifiers, dangling modifiers, faulty parallelism, and subject-verb agreement. The second instrument is the “critical thinking skills test” designed to assess skills in organizing ideas, making inferences, giving interpretations, comparing and contrasting, and making judgments. To determine whether the topics were proportionally represented, the table of specifications for the pretest and posttest were prepared. The tests were developed by the researchers and tested to establish validity and reliability.

## DATA COLLECTION, ANALYSIS, DISCUSSION

This part discusses the effects of cooperative learning strategies in developing linguistic competence, and critical thinking skills based on the collected data.



## Linguistic Competence (Mean Scores- LDM)

**Table 1. Comparison between the pretest and posttest mean scores under lecture-discussion method for linguistic competence**

Subject Matter	Mean Scores		Computed t-value
	Pretest	Posttest	
Sentence Fragments	3.08	5.17	8.68**
Run-on Sentences	3.51	5.83	21.44**
Misplaced Modifiers	3.46	5.31	7.69**
Dangling Modifiers	3.55	5.30	17.698**
Faulty Parallelism	3.04	5.27	7.39**
Subject-Verb Agreement	2.89	4.85	12.29**

\*\*= significant at .01

Table 1 shows the comparison between the pretest and posttest scores of the students taught with lecture discussion method (LDM). Based on the table, run-on sentence has the highest computed t-value followed by dangling modifier and subject-verb agreement. run-on sentence has the highest mean score among the six lessons discussed. The result shows that run-on sentence has a pretest mean score of 3.51 and a posttest mean score of 5.83. Dangling modifier has the least improvement though it has the highest pretest mean score which is 3.55.

The computed t-value reveals that there is a significant difference between the pretest and posttest mean scores thus, the hypothesis is rejected. The increase of mean scores in all the lessons discussed indicates that there is development of linguistic competence after the use of the lecture-discussion method.

## Linguistic Competence (Mean Scores- CL)

**Table 2. Comparison between the pretest and posttest mean scores under cooperative learning for linguistic competence**

Subject Matter	Mean Scores		Computed t-value
	Pretest	Posttest	
Sentence Fragments	3.11	6.85	15.03**
Run-on Sentences	3.05	7.29	8.94**
Misplaced Modifiers	3.58	7.19	15.52**
Dangling Modifiers	3.40	7.58	5.95**
Faulty Parallelism	3.08	6.92	17.40**
Subject-Verb Agreement	2.62	7.21	12.29**

\*\*= significant at .01

Table 2 shows the comparison between the pretest and posttest scores of students taught under cooperative learning method (CL). Based on the table, subject-verb agreement has the lowest pretest score (2.62) followed by run-on sentence (3.05) and faulty parallelism (3.08). It can be gleaned from the table that dangling modifier has the highest posttest mean score (7.58) followed by run-on sentence (7.29) and subject-verb agreement (7.21). Though subject-verb agreement has the lowest pretest score, it has a great increase in the posttest.

The computed t-value reveals that there is a significant difference between the pretest and posttest mean scores thus, the hypothesis is rejected. The increase of mean score in the posttest reflects the remarkable improvement of students' linguistic competence, and this result indicates that there is development of learning after the intervention of cooperative learning strategy.

### Linguistic Competence (Mean Gain Scores- LDM/CL)

**Table 3. Comparison of the mean gain scores in lecture discussion method and cooperative method for linguistic competence**

Subject Matter	Mean Gain Score		Computed t-value
	Lecture -Discussion	Cooperative Learning	
Sentence Fragments	2.10	3.74	4.73**
Run-on Sentences	2.32	4.23	5.84**
Misplaced Modifiers	1.85	3.60	5.26**
Dangling Modifiers	1.75	4.17	6.39**
Faulty Parallelism	2.23	3.85	4.34**
Subject-Verb Agreement	1.96	4.60	6.74**

\*\*= significant at .01 level

Table 3 shows the comparison of the mean gain scores of the lecture-discussion method and cooperative learning along the six lessons. Under the LDM, run-on sentence has the highest mean gain score while dangling modifier has the lowest mean gain score. Under the CL, subject-verb agreement has the highest mean gain score followed by dangling modifier and run-on sentence respectively.

The mean gain scores under cooperative learning are higher than the mean gain scores under lecture-discussion method. The computed t-value reveals that there is a significant difference between the pretest and posttest mean gain scores thus, the hypothesis is rejected. The remarkable difference reveals that students' linguistic competence is more developed when they are taught using cooperative learning strategies.

The result on the comparison of the mean gain scores between cooperative learning strategy and lecture-discussion method supports the studies conducted by some researchers. Camarao (1997) claimed that students exposed to cooperative learning performed better in the quizzes and achievement performance than those students exposed to traditional method of teaching.

### Critical Thinking Skills (Mean Scores- LDM)

Table 4. Comparison of the pretest and posttest scores of students under lecture-discussion method for critical thinking skills

Skills	Mean Scores		Computed t-value
	Pretest	Posttest	
Organizing Ideas	21.58	24.54	7.54**
Making Inferences	18.93	21.96	6.77**
Giving Interpretations	13.37	16.54	9.153**
Comparing and Contrasting	22.30	24.80	5.25**
Making Judgments	20.61	22.83	5.75**

\*\*=significant at 0.01 level

Table 4 shows the comparison between the pretest and posttest scores of students taught using the lecture discussion method. The table further shows that the skill in giving interpretations has a t-value of 9.153; followed by the skill in organizing ideas with 5.25 t-value; making inferences with 6.77; making judgments with 5.75; and comparing and contrasting with 5.25.

The computed t-value reveals that there is a significant difference between the pretest and posttest mean scores, thus, the hypothesis is rejected. Based on result, lecture discussion method can also effectively develop the critical thinking skills of the students. According to Elevazo (1995), it is very important for teachers to ask thought provoking questions that can stimulate and encourage student's thinking during lectures in the class.

### Critical Thinking Skills (Mean Scores-CL)

Table 5. Comparison between the pre-test and post-test scores of students taught under cooperative learning for critical thinking skills

Skills	Mean Scores		Computed t-value
	Pretest	Posttest	
Organizing Ideas	23.96	27.43	6.08**
Making Inferences	15.88	19.05	7.54**
Giving Interpretations	17.50	20.30	4.80**
Comparing and Contrasting	19.44	21.76	4.36**
Making Judgments	23.46	25.79	6.03**

\*\*=significant at 0.01 level

Table 5 shows the comparison between the pre-test and post-test scores of students taught under cooperative learning for critical thinking skills. The table further shows that making inferences has a t-value of 7.54; followed by organizing ideas, 6.08; making judgments, 6.03; giving interpretations, 4.80; and comparing and contrasting, 4.36.

The computed t-value reveals that there is a significant difference between the pretest and posttest mean scores thus, the hypothesis is rejected. It can be inferred that there is a significant improvement in the critical thinking skills of students taught using cooperative learning.

## Critical Thinking Skills (Mean Gain Scores-LDM/CL)

Table 6. Comparison of the mean gain scores in lecture discussion method and cooperative method for critical thinking skills

Skills	Mean Gain Scores		Computed t- value
	Lecture Method	Cooperative Method	
Organizing Ideas	2.97	3.46	0.631ns
Making Inferences	3.04	3.17	0.218ns
Giving Interpretations	2.80	3.17	0.545ns
Comparing and Contrasting	2.32	2.50	0.248ns
Making Judgments	2.22	2.32	0.185ns
Total Scores	13.85	14.13	0.171ns

ns= not significant

Table 6 shows the mean gain scores of students taught with lecture discussion method and cooperative learning. In the lecture discussion method, students obtained gain scores ranging from 2.22 (making judgments) to 3.04 (making inferences) while in the cooperative learning approach they obtained gain scores ranging from 2.32 (making judgments) to 3.46 (organizing ideas).

The study hypothesized that there is no difference in the mean gain scores of students for both methods. The computed t-test result shows that there was no significant difference in the mean gain scores, thus, the hypothesis is accepted. This finding proves that both methods can enhance learning of critical thinking. Though the difference is not statistically significant, all the numerical values under cooperative are still higher compared to the values under lecture discussion method.

## SUMMARY OF FINDING

This part summarizes all the analyzed and interpreted data.

### Linguistic Competence and Cooperative Learning

There are significant differences in the pretest and posttest mean scores in linguistic competence for both lecture-discussion method and cooperative learning, thus, the hypotheses are rejected. The increase of mean scores indicates that there is development of linguistic competence after the use of the lecture-discussion method and cooperative learning.

There is a significant difference in the mean gain scores in linguistic competence, thus, the hypothesis is rejected. This means that cooperative learning can give higher development in linguistic competence compared to the lecture-discussion method.

### Critical Thinking Skills and Cooperative Learning

There are significant differences in the pretest and posttest mean scores in critical thinking skills for both lecture discussion method and cooperative learning, thus, the hypotheses are rejected. The increase of mean scores indicates that there is development of critical thinking skills after the use of the lecture-discussion method and cooperative learning.

There is no significant difference in the mean gain scores in critical thinking skills of both groups under the two types of instruction. The mean gain scores of the two groups do not significantly differ in all the lessons, thus, the hypothesis is accepted. This finding proves that both approaches can enhance critical thinking skills.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

Cooperative learning is an effective alternative method to enhance or develop linguistic competence and critical thinking skills of students. Lecture-discussion method is a proven and still an effective approach in developing linguistic competence and critical thinking skills of students.

Though both methods can develop linguistic competence and critical thinking skills of students, the result points out that cooperative learning can give better or higher mean gain score in developing linguistic competence as compared to the lecture-discussion method. The result of the mean gain score under linguistic competence supports the literatures and studies that declare a remarkable increase in the achievement level of students undergoing cooperative learning strategies.

The increase of mean scores in all the lessons discussed under linguistic competence and critical thinking skills indicates that there is a proven and validated development of linguistic competence and critical thinking skills of students after the use of the cooperative learning and lecture-discussion method.

### **Recommendations**

Teachers should be encouraged or personally consider applying cooperative learning strategy as an alternative to lecture-discussion method or other instructional methods for it was proven to be effective in developing linguistic competence and critical thinking skills of students. Teachers should discover and employ various types of cooperative learning approaches in teaching to develop positive attitude of students towards the lesson and the use of this method.

Teachers and students should be properly guided on the objectives and procedures of cooperative learning to realize the advantages of this strategy. There should be guidelines to follow for its effective implementation in the classroom.

Administrators and school heads should support the participation of their teachers in seminars and trainings on cooperative teaching strategies to improve instruction. A seminar-workshop on cooperative learning should be conducted by school administrators for faculty members to learn the required procedures for the conduct of this method.

Other researchers should make parallel studies on the effects of cooperative learning approach in other fields of specialization to document information on the teaching-learning process.

### Statement of Competing Interest

The author has no competing interests.

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