

The Effectiveness of Cooperative Learning with STAD Technique to Improve Writing Skill and Motivation of English Department Students in UKI Toraja

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Abstract

This research aimed to find out whether the Cooperative Learning with STAD technique improves the students' writing skill of English Department students at UKI Toraja. The other objective is whether the students are motivated to the use of STAD. This research employed quasi-experimental design. It used two groups, one received STAD technique, Cooperative Learning method treatment and the other group received Group Learning method. The subjects of this research were class D and E of sixth semester student in academic year 2012/2013. Each group consists of 21 students. The data of this research was collected through writing test and questionnaire. The results of the research revealed that (1) the use of Cooperative Learning with STAD Technique improved the writing achievement of the sixth semester students from class D in experimental class. It is similar to the use of Group Learning in control group, but the improvement is more significant by using the Cooperative Learning with STAD Technique. It is shown by the mean score of pre-test and post-test. In control group the mean score increased from 63.05 to 69.95, while in experimental group the score increased from 58.24 to 79.4 (2) the students had high motivation in learning writing by using Cooperative Learning with STAD Technique. It was proved by the mean score of questionnaire, 83.05 which classified into motivated category.

Keywords: Cooperative Learning, STAD, writing skill, motivation

A. INTRODUCTION

One of the most important skills in learning English is writing, in which it is used to convey something to the reader. It is the act of putting down graphic symbols for accomplishing the purpose of giving information. According to Sapkota (2012, pp. 71-72) writing is essentially a thinking process and those thoughts are finally imprinted in a written form as writing.

To convey clear meaning, the writers have to use clear expression. Once the sentence or the words used is unclear, it will be difficult for the reader to grasp the meaning. It can impact on ambiguous interpretation. That is why, this skill have to be improved more and more.

In UKI Toraja, writing is taught at three levels. At the 3rd semester, students learn Writing I, in which they are taught how to compose good sentences. Here, they learn about the use of right punctuation, capitalization and kinds of sentences. When they came to the 4th semester, they learn Writing II in which they learn about the steps to compose good paragraph, and they learn to write essay writing at their 5th semester.

When the students have learnt the three levels of Writing, it is expected that they have been able to compose a good writing because they also have learned Structure, Vocabulary, and some other subject that support their ability in writing. In fact, based on the researcher experience when teaching writing there, the skill of some students are needed to be improved, especially the skill to compose good writing by referring to the five components of writing. They also have low motivation. It is proved by very few students asking or answering question in learning process and some of them are usually looked sleepy.

In teaching and learning process, motivation is really important. It is one of many factors that support students to learn, especially to learn a foreign language. The higher of the motivation can impact on the achievement. That is why, it is very important to create an interesting situation in the classroom, which can be achieved by using good method in learning.

One method that can be applied in teaching writing is Cooperative Learning. It is a kind of learning method in which students work in small group. On this small group they will

work together to accomplish the goal, not to compete each other. Here, all members are expected to be active. As a result, communicative language learning can be achieved.

There are some techniques that can be used in Cooperative Learning, and one of them is STAD (Student Team Achievement Division). In this technique, students with different level of ability will be put in one group. The members of the group encourage and help each other to achieve their individual accountability. There are four important points in STAD. They are: teach, team study, test and team recognition.

STAD has been used as technique on the research by some researcher. In maximizing students' anxiety in learning speaking, Suryani (2013) proved that it is effective. Karim (2013) has also proved that this technique is effective to improve students' achievement in writing procedure text.

In this research, the researcher will also focus on using this Cooperative Learning with STAD Technique to see whether it can improve students' writing skill. This research will be also used to see the wheatear the students are motivated to the use of STAD in learning writing.

B. REVIEW OF RELATED LITERATURE

Writing

Harmer (2011:10) defines writing as a productive skill which involves thought and emotion. It is a medium of communication that is used to convey meaning. Writing cannot be mastered at one, but everyone needs to practice a lot to be more competence. The practice can be in form of imitating or copying words and sentences from the giving ideas or expressing free ideas based on the writers' knowledge, experience and point of view.

Some researchers have claimed that writing can be experienced as one of the most difficult of all skills, requiring an intricate combination of neurological, physical, cognitive and affective competencies, according to Levine in Murray et al (2006).

In the process of writing, it needs attention for the rules such as structure or content. The aim is to tell about ideas, concept, or message from the writer to the reader. To make the reader easily grasp the meaning, writing must be clear. The clearer the writing, the easier the reader grasps the meaning.

Jacobs et al explains five components in writing as cited by Fatmasari (2011). Those are content, organization, vocabulary, structure or language use and mechanics.

Harsyad et al(2009) points out a series of activities in writing. They are: (1) preparing to write or pre-writing refers to the stage in which students gather the information and try to combine it into cohesive paragraph, (2) drafting refers to transfer the information the students have gathered, and (3) revising or editing refers to the process to revise and to edit the writing. After doing those step, and the students are sure about their writing, they can do the so-called post-writing. Here, they write down the final writing.

Cooperative Learning

According to Johnson (2002) there are three basic ways students can interact with each other as they learn. They can compete to see who is "best," they can work individualistically toward a goal without paying attention to other students, or they can work cooperatively with other students.

Cooperative learning is a teaching method where students of mixed levels of ability are arranged into groups to achieve a goal, and rewarded according to the group's success, not the success of an individual member. On this method, students do not compete each other to show the best, but they work together cooperatively to solve a problem. This method has five elements. They are: positive interdependence, promotive interaction, individual accountability/personal responsibility, interpersonal and small group skill, and group processing.

Students Team Achievement Division

According to Slavin in McLaren et al, STAD is one technique used in Cooperative Learning in which the teacher presents a lesson and students in heterogeneous groups of four or five work within their teams to master the lesson. Individual quizzes are then taken and success is based on improvement.

The STAD regular cycle of instruction is as follows:

- a. Teach: present the lesson.
- b. Team study: students work on worksheet in their team to master the material.
- c. Test: students take individual quizzes.

- d. Team recognition: team scores are computed on the basis of team members' improvement scores and certificates.

The step is well researched. There are five interlocking component: class presentation, teams, quizzes, individual presentation, and individual improvement scores team recognition. Teams are composed of four or five students who represent a cross section of the class in academic performance, sex, and ethnicity. The major function of quiz is to prepare the members to do well on the quizzes. In doing the quiz, students will not help each other to see their individual accountability. They will do it themselves.

Motivation

Donough (1993) states that motivation is the factors that support the students to learn English language, most language teacher agree that motivation is one of the most important factors influencing the students successful or failure in learning language. In oxford dictionary (1992:100) of current English, motivation is an energy within the person created by affective an arousal and anticipatory goal reaction.

Harmer (1993:3) distinguishes motivation into two kinds as extrinsic and intrinsic motivation. Extrinsic motivation is concerned with factor outside the classroom. Harmer (1993:4) points out that intrinsic motivation is concerned with what take place inside the classroom.

Reid (2007:15) explains that there are some factors that can influence students' motivation, they are:

- 1) Motivation by task
- 2) Motivation by reward
- 3) Social motivation – the influence of peer groups
- 4) Motivation by feedback
- 5) Motivation by achievement
- 6) Motivation by environment

C. METHOD

In this research, the researcher uses the quasi-experimental design. It uses two groups, one receives treatment (Cooperative Learning with STAD Technique) and the other group learns by using Group Learning. Both of groups are given pre-test and post-test. The pre-

test is done to find out the prior knowledge of students while post-test is done to find out the influence of using Cooperative Learning with STAD Technique in teaching English writing.

The population of this research was the sixth semester students of UKI Toraja, South Sulawesi in academic year 2012/2013. These students have taken Writing I, Writing II and Writing III. The total number of the classes is nine. Each class consists of different number of students. The sample was selected by using purposive sampling technique. There were two classes as the sample, and they were taken randomly to represent as experiment and control.

To collect the research data, the researcher conducts research by employing the setting below:

1. Pre-test: the researcher gives writing test to the students in essay writing form both to the control and experimental group. It is used to know their prior knowledge. The estimated time for the pre-test were decided after doing test try out.
2. Treatment: in control group, students will learn by using Group Learning, and experimental group will receive treatments by using Cooperative Learning with STAD Technique. The treatments are used to improve the students' writing skill.
3. Post-test: after doing the treatments the researcher gives a post-test. The researcher applies post-test to point out the students' achievement in writing. It is to know whether the treatment result a positive effect to the achievement of students.
4. Questionnaire is used to know whether the students' is motivated in learning writing by the application of Cooperative Learning with STAD Technique.

The data of writing test in pre-test and post-test were analyzed through quantitative analysis. To get the score the researcher used scoring scale which includes the content, organization, vocabulary, language use and mechanics on the students' piece of writing. The score were then analyzed by using (1) descriptive statistics, including mean and standard deviation; and (2) inferential statistics that is t-test to compare students' writing score before and after the treatment.

The data of questionnaire were analyzed into percentages to find students motivation toward the use of STAD. The students mean score was calculated. After that, the mean score was categorized into five, as showed in Table 1.

Table 1. Rating Score of Motivation

Score	Classification
85-100	Strongly motivated
69-84	Motivated
52-68	Fairly motivated
36-51	Unmotivated
20-35	Strongly unmotivated

(Sugiyono, 2008:182)

D. RESULT AND DISCUSSION

Students' Writing Achievement

The distributions of the students' score of pre-test and post-test were improving. Both of the groups improved in five components of writing, but in experimental group, the improvement was higher than that in control. The comparisons between students' mean score in five components of writing are shown in Table 2.

Table 2. The Comparison between Control and Experimental Group Mean Score in Five Components of Writing

Components of Writing	Pre-test		Post-test	
	Control	Experimental	Control	Experimental
Content	18.67	18.29	20.29	23.1
Organization	13.48	11.86	15.24	16.14
Vocabulary	12.25	12.19	14.29	16.33
Language use	15.29	12.76	16.71	20.43
Mechanic	3.10	3.14	3.43	3.48
Total	63.05	58.24	69.95	79.48

Table 2 shows that the mean score of control group was higher than experimental group in pre-test. Also, in four components namely content, organization, vocabulary and language use, control group has higher mean score. In post-test, the score of experimental group increased significantly, and it is higher than the score of control group.

The analysis of the mean score in five components of writing is described as follows:

- a. Content: the score of both groups is increasing after the treatment. The score of pre-test in control group is 18.67, while the post-test score is 20.29. It means that the score is higher in 1.62 points. In experimental group, the pre-test score is 18.29, and the post-test score is 23.1. The difference is 4.72 points. This score shows that after the treatment, the skill of students in this component in both group was increasing, especially in experimental group. Both of the groups are in fair to poor category after the treatment. This category means that the students have limited knowledge of the subject they write so they cannot develop it well
- b. Organization: the score in this component is also increasing. The score of pre-test in control group is 13.48, while the post-test score is 15.24. It means that the score is higher in 1.76 points. In experimental group, the pre-test score is 11.86, and the post-test score is 16.14. The difference is 4.28 points. This score shows that after the treatment, the skill of students in organization of both group was increasing, especially in experimental group. They are in same category that is good to average. This category means that they have limited support on the topic they have chosen.
- c. Language Use: in this component, both groups show improvement, but the experimental group shows more. The score of pre-test in control group is 15.29, while the post-test score is 16.71. It means that the score is higher in 1.42 points. In experimental group, the pre-test score is 12.76, and the post-test score is 20.43. The difference is 7.67 points. This score shows that after the treatment, the skill of students in language use of experimental group is increasing higher than in control group. After the post-test, the control group is in fair to poor category, and experimental group is in good to average.
- d. Vocabulary: in this component, both groups also show improvement. The score of pre-test in control group is 12.25, while the post-test score is 14.29. It means that the score is higher in 2.04 points. In experimental group, the pre-test score is 12.19, and the post-test score is 16.33. The difference is 4.14 points. This score shows that after the treatment, the skill of students in vocabulary of experimental group is increasing

higher than in control group. Both of the groups are in the same category, namely good to average, in which there are occasionally errors of word/idiom form, and also the choice.

- e. Mechanics: the score in this component is also increasing. The score of pre-test in control group is 3.10, while the post-test score is 3.43. It means that the score is higher in 0.33 points. In experimental group, the pre-test score is 3.14, and the post-test score is 3.48. The difference is 0.34 points. It shows that experimental group has higher improvement. Both of these groups are in fair to poor category. This means that both groups frequently did errors of spelling, punctuation, capitalization, paragraphing.

The mean score and standard deviation of the students' writing achievement in pre-test and post-test for both groups are shown in Table 3.

Table 3 The Mean Score and Standard Deviation of the Students' English Test in Pre-test and Post-test

	Control Group		Experimental Group	
	Pre-test	Post-test	Pre-test	Post-test
Mean score	63.05	69.95	58.24	79.48
Std. Deviation	18.96	13.4	18.73	14.37

Table 3 indicates that there were difference of students' mean score and standard deviation of students' writing test. The data analysis showed that the students' mean score of control group were greater in post-test (69.95) than pre-test (63.05).

The data shows that the difference between pre-test and post-test mean score in control group increased 6.90 points. In experimental group, the increasing is 21.16 points. This result shows that the implementation of Cooperative Learning with STAD Technique is more effective than Group Learning.

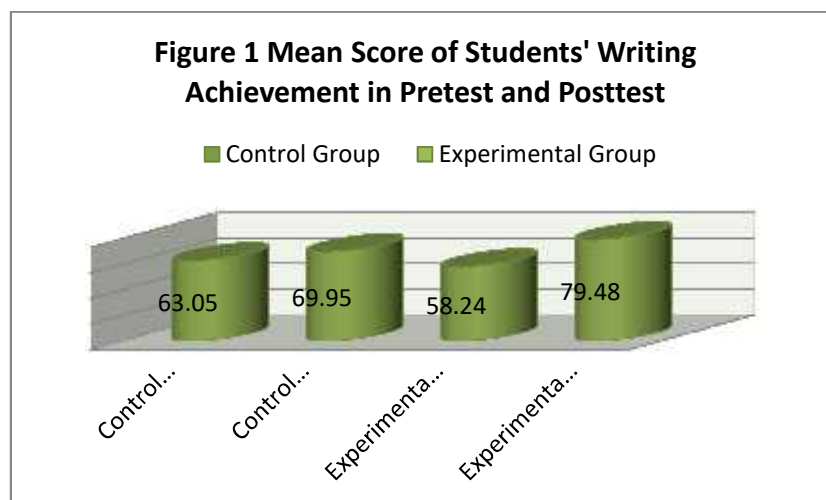
Table 3 also indicates that there were difference of students' mean score and standard deviation of students' writing test. The data analysis showed that the students' mean score of control group were greater in post-test (69.95) than pre-test (63.05). In control group, the range from post-test (69.95) to pre-test (63.05) was 6.9. The students' mean score of

experimental group was greater in post-test (79.48) after conducting treatment than pre-test (58.24). Experimental group has a range of 21.16 from post-test (79.48) to pre-test (58.24).

Furthermore the table shows that the standard deviation of control group in pre-test was 18.96 and post-test was 13.4. It means that control group had differences of students' variety score in English test. The standard deviation of experimental showed in the table was 18.73 for the pre-test and 14.37 for the post-test. It means that after conducting treatment in experimental group, the variety of students' score is not very significant.

The result shows that Cooperative Learning in experimental group gave higher improvement than Group Learning in control group. It means that Cooperative Learning with STAD Technique is effective in teaching writing.

The comparison of experimental and control group mean score can be seen on the figure 1.



The researcher used t-test (test of significance) independent sample test and t-table. The purpose of test to know the significance of difference between the results of students' means scores in post-test of experimental group and post-test of control group.

It had been known that the level of significance () = 0.05 with degree of freedom (df) = $(n_1 + n_2) - 2$, where n = number of subject (21), $(df) = (21 + 21) - 2 = 40$, so that the total number of subject is 40. To test of t-table, it was obtained through the formula as follow:

$$\begin{aligned}
 \text{T-table} &= \left[1 - \frac{(\alpha)}{2} \right] N - 2 \\
 &= \left[1 - \frac{0.05}{2} \right] 42 - 2
 \end{aligned}$$

= 0.975 is the column and 40 is the line so the result of t-table is 2.02. If t-table (2.02) > t-count so Null Hypothesis (H₀) was accepted and in contrast if t-table < t-count so Null Hypothesis (H₀) was rejected. Table 4 is the t-test results in pre-test and post-test in term of literal, inferential, and critical

Table 4 The Probability Value of t-test of the Students' Writing Achievement in Pre-test and Post-test

	t- table	t- count	2 Tailed Value (Probability Value)	()	Remarks
Pre-test in Experimental and Control Groups	2.02	0.827	0.413	0.05	There was no different or Null Hypothesis was rejected
Post-test in Experimental and Control Groups	2.02	2.221	0.032	0.05	Significantly Different or Alternative Hypothesis was accepted

The result of data analysis as summarized in table 4 on pre-test of control and experimental groups, the researcher found that the Probability value (0.413) was higher than the level of significance at () = (0.05). The data also showed that the t-count value was smaller than t-table (0.827 < 2.02). It indicated that the Alternative Hypothesis (H₁) was rejected and the Null Hypothesis (H₀) was accepted. In the other word, there was no significant difference between the students writing achievement in pre-test before treatment. After treatment, the researcher found that the Probability value (0.032) was smaller than the level of significance at () = (0.05) and the degree of freedom 42. The

data also showed that the t-count value was higher than t-table ($2.221 > 2.000$). It indicated that the Alternative Hypothesis (H_1) was accepted and the Null Hypothesis (H_0) was rejected. In other word, there was significant difference between the students' writing achievement in post-test after giving the treatment through the implementation of STAD Technique of Cooperative Learning.

Students' Motivation

The use of questionnaire is very popular to collect data in education and social research. The distribution of questionnaire in this research aims to find out whether the students are motivated in learning writing by using STAD Technique of Cooperative Learning. The questionnaire was distributed to the students in experimental group after the treatment. In this research the questionnaire included 20 items which were expected to find out the motivation of the students in learning writing.

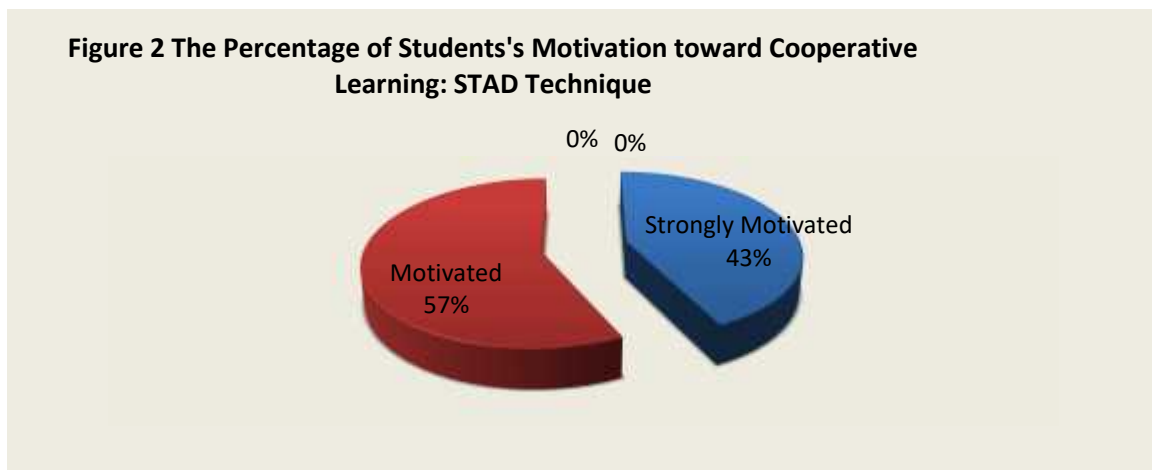
The questionnaire was responded the students individually refer to the students' opinion after the treatment using STAD Technique. The motivations of experimental group students in learning writing by using STAD Technique showed a great positive. Refers to the data analysis of the questionnaire items, the mean score of questionnaire were 83.05 and categorized into motivated classification. The data analysis can be seen in the following table.

Table 5. The Rate Percentage of the Students' Motivation

No.	Classification	Range Score	Frequency	Percentage
1.	Strongly motivated	85-100	9	42.86
2.	Motivated	69-84	12	57.14
3.	Fairly Motivated	52-68	0	0
4.	Unmotivated	36-51	0	0
5.	Strongly unmotivated	20-35	0	0
	Total		21	100

Based on the data on the Table 5, the data of questionnaire of the experimental group stated that none of the students responded in negative statement toward the use of STAD Technique of Cooperative Learning, it showed that 9 (42.86%) of students who were motivated and 12 (57.14%) of students were strongly motivated. The data shows that the highest score is 95 and categorized as strongly motivated. The lowest score is 68

and categorized as motivated. The percentage of students' motivation toward the use of Cooperative Learning with STAD Technique can be seen on the following figure:



E. CONCLUSION

The use of Cooperative Learning with STAD Technique is significantly effective to improve the writing skill of the sixth semester students of UKI Toraja in experimental class. The score of questionnaire analysis showed a great positive in motivations of sixth semester students of UKI Toraja in experimental class by using Cooperative Learning with STAD Technique. It means that the students are motivated to the use of STAD in writing teaching.

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