

COOPERATIVE VS PROJECT-BASED LEARNING IN TEACHING WRITING NARRATIVE TEXT

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Abstract

Writing is one of four basic skill which becomes a point of attention to this research. It is due to the lack of capability of students especially in vocational high school to communicate through written text. Two methods had been chosen to be implemented to the students; cooperative learning and Project-based learning. The aim of this research is to know whether or not there is a significant difference between those two methods. The population used was ten grade students of a vocational high school in Cimahi, while the samples were two classes; one as an experimental class and the other as control class. The result from pre-test and post-test showed that there is significant difference between those two classess. Cooperative learning seemed to be more effective since the method gave the opportunity for the students to work as a group as well as project-based learning did. However, in cooperative learning, students did not work without teachers' guidance. It means that even though students need to be given chance to work freely, they still need teachers as the guidance for their earning activity.

Keywords: *Cooperative learning, Students' Team Achievement Devision (STAD), Project-based learning, Writing Narrative Text.*

Abstrak

Kemampuan menulis adalah salah satu dari empat kemampuan dasar berbahasa Inggris yang mendapat perhatian pada penelitian ini sebab masih banyak siswa SMK yang masih kesulitan dalam menulis sebagai sarana berkomunikasi melalui teks tulis. Terdapat dua buah metode yang dipakai untuk mengajar yaitu metode kooperatif dan pembelajaran berbasis proyek. Tujuan dari penelitian ini adalah untuk mengetahui apakah kedua metode tersebut menghasilkan perbedaan yang signifikan pada pembelajaran menulis. Populasi yang diambil adalah kelas 10 SMK, dan sebagai sampel dipilih dua kelas sebagai kelas eksperimental dan kelas kontrol. Hasil yang didapat menunjukkan bahwa memang terdapat perbedaan antara penggunaan kedua metode tersebut. metode kooperatif menunjukkan hasil yang lebih baik pada hasil kerja siswa. Ini dikarenakan metode koopratif selain memberikan kesempatan siswa untuk bekerja dalam kelompok seperti halnya metode Pembelajaran berbasis proyek, tetapi metode kooperatif juga memfasilitasi siswa dengan kehadiran guru. Sehingga dapat disimpulkan bahwa meskipun siswa merasa senang bekerja dalam kelompok, mereka tetap membutuhkan guru untuk mengarahkan pekerjaan mereka.

Kata Kunci: *Metode Kooperatif, Students' Team Achievement Devision (STAD), Pembelajaran berbasis proyek, kemampuan menulis teks naratif*

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INTRODUCTION

English on School-based curriculum in Indonesia has main purpose on enhancing students' capability on communication (KTSP, 2016). To be able to communicate well, students must learn at least for basic skills of English covering listening, speaking, reading, and writing. Communication always leads us to the activity of speaking rather than writing. In fact, writing is somehow more

difficult if it is compared with speaking. Writing is a complex skill which involves many aspects in it. However, mastering writing skill becomes essential since writing facilitates students on transferring knowledge. Through writing, students can express feeling, describe something, discuss an idea, present a point of view, and share experience they have in the form of written product (Argawati & Suryani, (2017).

Writing is becoming a difficult skill to master since it has many indicators or aspects in it. At least there are five main indicators that need to be considered by the students when they learn to write. Brown (in Puspita, 2014: 36), state the five indicators of writing as follows: (1) Content; the paragraph contains complete sentences and correct use of tenses, degree of comparison and adjective, (2) Organization; the major points of the text are supported by relevant orientation; events and reorientation in detail of content, (3) Vocabulary; the paragraph shows that personal pronoun, linking verb and adjective are used appropriately, (4) Language use; effective complex constructions, few errors of agreement; word order/ function and good meaning, (5) Mechanics; Spelling, punctuation and capitalization are correct.

Based on the pilot project conducted by the researchers before, students in ten grade of vocational high school are having difficulties on writing. When the researchers did the teaching and learning process there, the theme used was narrative text. They were still confused on the use of grammar in narrative text and so on. By the data gathered before that the students in ten grade of vocational high school have problem on writing, researchers try to figure out the suitable method of teaching to be implemented in the class. There were two teaching methods chosen; they are cooperative learning with STAD and Problem-based learning.

Cooperative learning is defined as learning based on a small group approach in teaching and learning process that holds students accountable for both individual and group achievement (Orlich, 2007: 273). It relates on creating opportunities for the students to work by their own in group. One of the teaching method belong to cooperative learning is Students' Team Achievement Divisions (STAD). STAD enables teacher to set the students into group and make them be responsible with their own group. Slavin (in Trianto (2007: 52) suggest that in Students' Team Achievement Divisions (STAD) students are placed with learning teams of 4-5 people who are a mixture according to the level of achievement, gender and ethnicity.

Moreover, Suprijono (2013: 133) suggest some steps to implement STAD; namely: (1) Form groups of 4-5 students in heterogeneous members (mix according to achievement, gender, ethnicity, etc.), (2) Teachers present the lessons, (3) Teacher gives a task to the group and it will be answered by members of the group. Members who already understand can explain to other members until all members understand, (4) Teacher gives a quiz or question to all students. When answering the quiz should not help each other out, (5) Giving the evaluation, and the last step is (6) Conclusions.

While Problem based learning (PBL) is a teaching method in which complex real-world problems are used as the vehicle to promote student learning of concepts and principles as opposed to direct presentation of facts and concepts (Duch et al, 2001). It is considered as a more complex method of teaching for students since it relates with their critical thinking and creativity. Once need to use their ability on joining the lesson using this kind of teaching method. However, it helps students on provoking and improving their critical thinking and creativity, and also their courage to solve the problem given.

On implementing the Project-based learning, researchers followed these several steps based on Kamdi (2007: 77): (1) Student Orientation to Problems: The problem based learning approach begins with the name orientation or introduction. Inside includes : Achieving goals that the teacher

wants to achieve, Explanation of logistics required, Giving a problem to students, Giving motivation so students are directly involved and play an active role, (2) Organizing Students To Learn: At this stage the teacher can perform her role to help students in organizing learning assignments related to the problems given, (3) Guiding Investigations: In this case the teacher carries out a form of effort to encourage students to gather the information needed, conduct experiments and solve problems that have been given, (4) Presenting and Developing The Work: The teacher provides assistance to students in terms of planning and presenting works such as reports and so on. In addition, teachers also help students to share assignments in group activities, (5) evaluate and analyze the Problem Solving Process: The teacher makes an effort to help students evaluate the processes that have been carried out during problem solving activities.

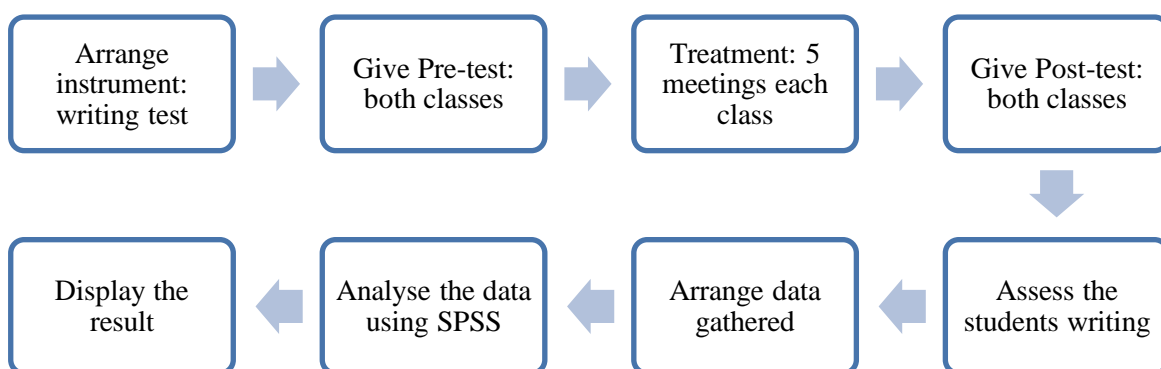
Based on the background of research explained above, this research is aiming on investigating the significant difference between cooperative learning type STAD with Problem-based Learning in teaching writing to ten grade students of vocational high school in Cimahi.

METHOD

This research used quantitative research method with quasi-experimental design. It aims on finding the significant difference between the uses of cooperative learning type STAD versus problem-based learning in teaching writing especially in narrative text. The population of this research was ten grade students of a vocational high school in Cimahi, while the sample were two classes; one as the experimental group and the other is the control group which consist of 30 students in each class.

Test (both for pre-test and post-test) was conducted as the instrument. The test was in the form of instruction for the students to write a passage related to narrative text taught before and the result was assessed based on the scoring rubrics containing five indicators of writing (content, vocabulary, organisation, language use, and mechanics). The data gathered were in the form of students’ writing score and were analysed using spss to know whether or not these two methods of teaching showed differences in the result.

Some procedures of research were applied to make sure that the research runs in a systematic way. The procedures can be seen in the chart below:



RESULTS AND DISCUSSION

Results

The results of this research, the researcher analyzed the data by using SPSS v.22 for windows software to described and gained the result of the test; the pretest and posttest results, the comparison results scores between two test in order to know whether there was a significant difference between the students who were taught by using cooperative learning and the students

who were taught by using problem based learning or not. Here are the descriptive statistic of the data gathered in the form of students' score in both pre-test and post-test which is presented in table 1.1 below.

Table 1.1
Descriptive Statistics

Writing Skill		Experimental class			Control class		
		Pre-test	Post-test	N-Gain	Pre-test	Post-test	N-Gain
	N	30	30		30	30	
	Mean	41.17	78.87	0.63	41.57	71.77	0.51
	Maximum	53	90	0.83	53	88	0.80
	Minimum	25	58	0.10	25	53	0.24
	Std. Deviation	8.355	8.283		7.233	8.661	

The table 1.1 shows that the mean pretest score of experimental class is 41.17 with maximum score 53 and minimum score 25. Then mean of pretest of control class is 41.57 with maximum score is 53 and minimum score is 25. It can be seen that the mean of pretest score of experimental class and control class are different. Meanwhile, the mean of posttest score of experimental class is 78.87 with maximum score 90 and minimum score 58. Then mean posttest of control class is 71.77 with maximum score 88 and minimum score 53. It can be seen that the mean posttest score experimental and control class are also in a different level of score. However, before the t-test is done the data should be tested by the normality test and homogeneity test for both score from pre-test and post-test.

1. Data Analysis of Pre-Test

a. Normality Distribution Test

The result of normality distribution test is presented in table 1.2 below:

Table 1.2
Test of Normality

	Class	Kolmogorov-Smirnov ^a		
		Statistic	Df	Sig.
PRETEST	Experiment	.154	30	.069
	Control	.145	30	.109

a. Lilliefors Significance Correction

The table 1.2 above shows that the data from pre-test were in normal distribution because sig. of experimental class and control class were higher than the level of significant 0.05. The computation continued to homogeneity of variance test.

b. Homogeneity Test of Pretest

The result of Homogeneity of variance is presented in table 1.3 below:

Table 1.3

Test of

		Levene Statistic	df1	df2	Sig.
Posttest	Based on Mean	.065	1	58	.799
	Based on Median	.056	1	58	.814
	Based on Median and with adjusted df	.056	1	57.860	.814
	Based on trimmed mean	.072	1	58	.789

Homogeneity of Variance of pre-test

The table 1.3 above shows that the significance level based on mean of pretest scores from experiment class and pretest scores from control class was 0.288. It was bigger than degree of significance 0.05. Therefore, it can be concluded that the data were homogeneous distributed. The next step of this analysis is independent sample of t-test.

c. Independent Sample T-Test of Pretest

The result of independent sample test is presented in table 1.4 below:

**Table 1.4
Independent Sample T-Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	1.149	.288	-.230	58	.819	-.467	2.026	-4.522	3.589
	Equal variances not assumed			-.230	56.983	.819	-.467	2.026	-4.524	3.590

The table 1.4 above presents that the sig 2-tailed was 0.819. It was bigger than the level of significant 0.05. It can be concluded that H₀ (H-null) hypothesis was accepted. In other words, there was no significant difference between students who were taught using cooperative learning and those who were taught using problem based learning approach in teaching writing narrative text.

2. Data Analysis of Post-Test

a. Normality Distribution Test

The Result of Normality Distribution Test is presented in table 1.5 below:

Table 1.5
Test of Normality of post-test

	Class	Kolmogorov-Smirnov ^a		
		Statistic	Df	Sig.
POSTTEST	Experiment	.158	30	.055
	Control	.112	30	.200*

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The table 1.5 above shows that the data were in normal distribution because sig. of experimental and control class were higher than the level of significant 0.05. The computation continued to homogeneity of variance test for post-test.

b. Homogeneity of Variance Test

The result of homogeneity of variance for post-test is presented in table 1.6 below:

Table 1.6
Homogeneity of Variance for post-test

		Levene Statistic	df1	df2	Sig.
Posttest	Based on Mean	.274	1	58	.603
	Based on Median	.310	1	58	.580
	Based on Median and with adjusted df	.310	1	57.685	.580
	Based on trimmed mean	.288	1	58	.594

The table 1.6 above shows that significances level based on mean of posttest scores from experiment class and posttest scores from control class was 0.603. It was bigger than degree of significance 0.05. Therefore, it can be concluded that the data were homogeneous distributed. The next step of this analysis is doing the independent sample of T-test.

c. Independent Sample T-Test of Posttest

The result of independent sample test of post-test is presented in table 1.7 below:

Table 1.7
Independent Sample T-Test of post-test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Posttest	.065	.799	3.245	58	.002	7.100	2.188	2.720	11.480
			3.245	57.885	.002	7.100	2.188	2.720	11.480

Table 1.7 above presents that the sig 2-tailed was 0.002. It was lower than the level of significant 0.05. It means that H_0 (H-null) hypothesis was rejected. In other words, there was significant difference between students were taught using cooperative learning and those who were taught using problem based learning approach in teaching writing narrative text.

Discussion

In the discussion session, the researchers tried to gather all of the information coming from the data and explain the finding. As it shows on the description of the data above, there are differences in the score of students pre-test and post-test in both classes; in experimental and in control class. The differences was due to the different methods implementedd in those classes. Experimental class showed better result if it is compared with control class. However, we do need to find whether the difference is significant or not by doing the computation through statistic using SPSS.

Based on the computation of pretest score both in experimental class and control class, the data were in normal distribution since significant of experimental class and control class were higher than level of significant 0.05. The computation continued to homogeneity of variance test, and the data were homogeneous distributed. Meanwhile, the data of independent sample t-test presents that the sig 2-tailed was 0.819. It was higher than the level of significant 0.05. It can be concluded that H_0 (H-null) hypothesis for pretest was accepted and. In other words, there was not significant difference between students were taught by using cooperative learning and those who were taught by using problem based learning approach in teaching writing narrative text in the initial stage.

Based on the computation of posttest score both in control and experimental class, it showed that the data were normality distributed since the significant of experimental class and control class were higher than level of significant 0.05. The homogeneity of variance was homogeny; it shows that based on mean the sig. was 0.002, it was lower than the degree of significance 0.05. It means that H_0 (H-null) hypothesis was rejected. In the other words, there was a significant difference between experimental and control class.

In the result of posttest experimental class and control class to find difference significant degree, it could be seen from the average of posttest results in experimental class was 79 and control class

was 72. Meanwhile, the data average of pretest results in experimental class was 41 and control class was 42. There was significant difference between pretest and posttest in teaching writing narrative text by using cooperative learning type students' team achievement division (STAD) as experimental class and problem based learning as control class. The significant degree of mean posttest score in experimental class was higher than the mean posttest score in control class.

Those computation results have similar with the previous study. The previous study is taken from the journal conducted by Hayatunisa (2014) which entitle "Student Teams Achievement Divisions (STAD) Technique In Teaching Writing Narrative Text" she said student teams achievement divisions (STAD) technique is effective in teaching writing narrative text.

This kind of phenomenon may happen since students hav their own characteristics. Students with high cabability of English may feel more comfortable to work individually since they have high self-confidence. However, not all of the students in this vocational high school have the same level of capability. It has possibility that they do not have great capability in English. Project-based learning is a good method ofteaching which improve students' critical thinking and creativity. In the other hand, students need to have encouragement to do so. However, STAD is a cooperative method which leads students to work in group and it is not without the guidance from the teachers.

As the result in this research, students who were taught using STAD showed better achievement in writing than those who were taugh using Project-based learning because the capability of the students in English is various. It reflects that they still need guidance from the teacher while working in the group. It means that, giving them the opportunity fro working by their own friends in group does not mean that they can do all of the task without guidance from teacher. therefore, as a teacher we need to pay more attention to what our students really need to adjust to the method we choose in the classroom.

CONCLUSION

The focus of this research is identified whether or not there is a significant difference between the use of cooperative learning and problem based learning in teaching writing narrative text to the ten grade of vocational high school. In this research, the writer used class A as experimental class and B as control class at tenth grade students of one of vocational school in Cimahi. The pretest result of T-test presents that the sig 2-tailed was 0.819. It was bigger than index 0.05. It can be concluded that HO (H-null) hypothesis was accepted. In other words, there was no significant difference between students were taught by using cooperative learning and those who were taught by using problem based learning approach in teaching writing narrative text. Then the posttest results of T-test presents above presents that the sig 2-tailed was 0.002. It was lower than index 0.05. It can be concluded that HO (H-null) hypothesis was rejected. In other words, there was significant difference between students were taught by using cooperative learning and those who were taught by using problem based learning approach in teaching writing narrative text. Based on the results and the interpretation of the data, it could be concluded that the result of T-test formula to test the hypothesis of the research supported there is significant difference between students who were taught by using cooperative learning and students who were taught by using problem based learning approach in teaching writing narrative text.

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