



The Effectiveness of Write-Pair-Square and Group Investigation to Teach Writing Descriptive Text for Students With High and Low Participation

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Abstract

Recently, teaching and learning English as foreign language has raised its position as a trending field in language transformation in Indonesia. This study aimed to measuring the effectiveness of Write-Pair-Square and Group investigation to teach writing descriptive text as two cooperative learning strategies. There were 50 students of the seventh grade students of MTs N Tegal. This study used an experimental method with pre-test and post-test of a 2x2 factorial design. Two classes were chosen as experimental group 1 and 2, while the third class was chosen for tryout. The data of students' participation level was gained from observation before the treatments and the data of students' writing achievement was gained from writing test. The data from the test was analyzed with T-Test and ANOVA Test. The results revealed that there was significant difference of the students' participation on the post-test result after being taught by using Write-Pair-Square and Group Investigation strategies. Then, the result of the significance value (p value) of teaching strategies and participation was $0.032 < 0.05$. Thus, it can be stated that there is effective interaction among strategies and participation to enhance students' writing achievement.

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INTRODUCTION

Recently, teaching and learning English a foreign language has raised its position as a trending field in language transformation in Indonesia. Teachers and learners practice different ways to be well-competent in English for teachers. Applying appropriate language teaching approaches, methods, or techniques is the primary prospect. As the core practitioners, teachers are demanded to help learners build their knowledge of English. Their contribution toward learners' improvement including the way to deliver knowledge in the classroom is required.

Writing as one of the skills taught in junior high school, it requires the students to master writing skill well. In 2013 curriculum writing as one of the standard competence that can be found in the English syllabus grade VII in semester 2. The students have to master the four basic language skills. They are listening, speaking, reading and writing. Writing is one of the language skills that must be mastered by students when learning a language. Because with writing can be a process of discovery for students as they find out new ideas and new language forms to express them. Mo (2012, p.122) added that teaching English foreign language writing should be in a comprehensive way. All teaching approaches have their advantages, and teacher should not be so keen on one approach and exclude all others. It is necessary for teacher to be creative and attractive, so students will enjoy the activity of writing.

There are some techniques under the umbrella of Cooperative Learning. They are Group-Investigation, Student Teams Achievement Division (STAD),

Learning Together, Jigsaw, Murder and Write-Pair-Square (Jacob, McCaferty, & Steven G., 1999). All of them are suitable to be implemented in the Language Teaching. In cooperative learning, the students are not depending on the teacher. They are not merely listening to the teachers' lecture but they actively participate in the classroom activity. Syafini and Rizan (2010) mentions that group works sometimes the participation of the group members is not equal and there are group members who indulge on a free ride without contributing the group work and objective. Kagan (2009) states that literally hundreds of studies demonstrate cooperative learning boosts achievement more than traditional methods. Cooperative learning outperforms competitive and individualistic. A lot of researchers on some studies have applied cooperative learning to enhance students' achievement (p.32).

In the previous studies, the researchers employed cooperative learning of WPS and Group Investigation to students' writing achievement. The study was aimed to improve the students' achievement in writing descriptive text whether the implementation of guided writing strategy and the students' achievement motivation gave a significant effect to the students' writing competency. Cooperative learning proved to be practical and widely acceptable to students. When students were not able to understand teacher's explanation, group members were able to explain in simpler words that were more easily understood. In this way, it improved students' perception about learning and decreased the feeling of alienation. Meanwhile this research tried to find out the effectiveness

of cooperative learning on WPS and Group Investigation which was proposed to improve the descriptive text writing ability for the students with different levels of motivation.

Based on my preliminary study, there some problems identified in that students face in learning to write. First, students come from different background of study such as in junior high school that the students are lack of vocabulary, grammatical competence in English and they are lack of confidence to write since they have no background knowledge in English. Besides that, students are lack of valuable input through consultation and feedback from teacher and their classmates. They also find it hard to organize logical sentences with appropriate use of mechanism. The students also experience passiveness and boredom in writing and have minimum opportunity to write besides the practice of monotonous teaching and learning strategy from teacher. The general problems mentioned besides other unidentified ones are the shortages students have especially to string up a high quality of written work.

Referring the topic and problems above, it is important to consider some notions which certainly become the focus as proposed solution in this study. I propose collaborative writing where students write collaboratively whether in group or pair. Collaborative writing is basically collaborative learning which merely focuses on writing. Some studies assumed it as providing positive impacts toward language learners' writing proficiency, since a series of writing is accomplished together rather than alone individually.

METHOD

This study used an experimental method with pre-test and post-test of a 2x2 factorial design. The object of the study is the increase of writing ability by using two strategies compared. They are Write-Pair-Square and Group Investigation. There were 50 students of the seventh grade students of MTs N Tegal. Two classes were chosen as experimental group 1 and 2, while the third class was chosen for tryout.

This study used numerical data and was analyzed using numerical comparisons and statistical packagers for social sciences (SPSS) computer program formed tabulation. The quantitative data in this study are taken from pre-test, post-test and questionnaire. Those test were conducted in the form of writing test. The experimental group 1 and group 2 had the same test. The pre-test used to measure students' writing before the treatment and the post-test was used to measure students' writing after treatment. The questionnaire used in this research based on Eysenck Personality Inventory (EPI). So the researcher can classify students with high and low participation.

After collecting the data, the writer analyzed the students' results of pre-test and post-test by using t-test was used to test the result of teaching writing descriptive text by using WPS and Group Investigation to students with high and low participation. While ANOVA test was used to check the relationship between variables which differ from one another.

RESULTS AND DISCUSSION

This study aims to describe the effect of WPS and Group Investigation strategy in teaching writing descriptive

with high and low participation in the seventh graders of MTsN Tegal. In this study, there are two different groups namely first experimental 1, i.e. VII A, treated with WPS strategy and the second experimental group, i.e. VII B, treated with Group Investigation strategy. This section presents the discussion of the whole results of the study. The statistical analysis is used to answer research questions; hypothesis test and draw precise interpretation.

Before conducting the study, there are two tryouts initiated to describe the validity and reliability of the test. Both participation questionnaire and writing test are tested in the try out. The result shows that all of items in the questionnaire are reliable. However, some of those items are invalid. Thus, the invalid items are dismissed. Meanwhile, the result of the writing test try out is valid and reliable.

In the first step in gaining the data during the research is distributing the questionnaire to determine students' participation, whether they are considered

having high and low participation. The questionnaire items of statements are in Indonesian version to make the students easier in understanding all of items. To answer the questionnaire the students should put a check (✓) on each statement based on their participation.

Then, students develop their ideas as the elaboration. Finally, in shift or elaboration, students make the conclusion guided by teacher. After receiving the treatment, students have their post-test writing. This test is used to find out the result of students' writing achievement before and after the treatment. The writing post-test is in the form of essay.

Then, the normality is conducted to find out whether of pre-test and post-test has normal distribution or not. The normality test used One Kolmogorov-

Afterwards, the pre-test is conducted to find out the students' writing achievement before conducting the treatment. The pre-test writing is in the form of essay. Students from both experimental groups are asked to write a piece of descriptive text. The treatments for both experimental groups are conducted eight meetings. In the experimental group 1, the introduction descriptive text is given in the first meeting. Meanwhile, in the experimental group 2 used Group Investigation strategy in teaching writing descriptive text. In the first meeting, students are introduced to descriptive text along with its structure and linguistic feature. Moreover, the students asked to identify the structure, linguistic features of descriptive text entitled "describing person" in pairs.

In the second up to eighth meeting, students taught with WPS strategy in group to identify the picture of descriptive text, discuss to others and write the descriptive text. The strategy is called Write-Pair-Square since students have share their ideas based on what they think and then write by using their own words. After receiving the treatment during eight meeting, students gave their writing post-test.

Sminov Test by SPSS 23.0. The result showed that significance score (Sig) of pre-test the experimental group 1 that is taught with WPS strategy are 0.111 and 0.309. Moreover, the result also shows that the significance score (Sig) of the pre-test of the experimental group 2 that is taught with Group Investigation strategy are 0.258 and 0.105. Each of significance score higher than level of significance (α) = 0.05. Hence, H_0 is accepted. Therefore, it can be concluded that pre-test data of both

experimental groups have a normal distribution.

Meanwhile, the result of the normality test of the post-test showed that significance score (Sig) of post-test the experimental group 1 that is taught with WPS strategy are 0.200 and 0.072. Moreover, the result also shows that the significance score (Sig) of the post-test of the experimental group 2 that is taught with Group Investigation strategy are 0.087 and 0.200. Each of significance score higher than level of significance (α) = 0.05. Hence, H_0 is accepted. Therefore, it can be concluded that pre-test data of both experimental groups have a normal distribution.

Then, the homogeneity is the important consideration before conducting the parametric statistical analysis. The homogeneity is used to measure whether the result of the pre-test and post-test homogenous or not. The data of pre-test and post-test is analyzed using Levene's test for Homogeneity variance.

The result of homogeneity test of pre-test for students with high and low participation shows that the significance score (Sig) is 0.877. Meanwhile, the result of homogeneity test of post-test for students with high and low participation shows that the significance score (Sig) is 0.549. Each of it is higher than level of significance (α) = 0.05. As the result, H_0 is accepted. Hence, the data of the pre-test and post-test for students with high and low participation in both experimental groups are homogenous.

To answering the research question this part to be discussed the hypotheses test. The explanations are as follows.

Teaching Writing Using WPS to Students with High Participation

The results show that there is significant improvement to students with high participation post-test scores. The mean score increases 2.47 points. It means that WPS is effective to teach writing descriptive text for students with high participation. It is also supported by t count measurement. T count is higher than t table, which means that H_{01} is rejected and H_{a1} is accepted.

The results give a sign that WPS gives positive effect to students' writing because it provides many opportunities for students to work together and share their understanding. It is in line with Wang (2007) who states that in WPS, students with high and low participation interact with each other to complete tasks in group work, which can assist the process of language learning to gain academic achievement and improve social skills.

Teaching Writing Using WPS to Students with Low Participation

The pre-test mean score result of students with low participation who were taught with WPS is 78.35. It is only slightly higher than the pre-test mean score result of students with high participation who were also taught WPS. The difference is only 1.09 points. While the post-test mean score result for this group shows that there is also significant improvement. The post-test mean score increases 4.44 points from pre-test mean score. It means that WPS is also effective to teach writing descriptive text for students with low participation. It is also supported by t count result. T count is higher than t table, it means that H_{02} is rejected and H_{a2} is accepted.

This result is an evidence that WPS also gives positive effect to students

with low participation because it provides a cooperative learning environment which fosters learner activity, joint acquisition of content and mutual explaining. WPS also adds an extra source of learning within the groups because some achievers act as a role of tutor, and consequently results high achievements. Finally, it provided the students with the requirements of the modern society by teaching them to work with their colleagues competently and successfully (Van Wyk, 2007).

Teaching Writing Using Group Investigation to students with High Participation

Students mean score before and after the treatment shows significant difference based on the statistical analysis. Their post-test is better than pre-test. The mean score increases 1.39 points and t count is higher than t table. It means that H01 is rejected and Ha1 is accepted.

The result apparently shows that Group Investigation plays its role in improving students' writing achievement. Group Investigation is an effective organizational medium for encouraging and guiding students' involvement in learning. By communicating freely and cooperating in planning and carrying out their chosen topic of investigation, they can achieve more than they would as individuals (Sharan and Sharan, 1990).

Teaching Writing Using Group Investigation to Students with Low Participation

Based on the statistical analysis result, students with low participation also perform different result on their post-test compared to their pre-test. The post-test mean score is better than the pre-test mean score. The mean score improvement is 5.000 points. Moreover, based on table

4.14 count is also higher than t table. Therefore, H04 is rejected and Ha4 is accepted.

The output above brings to the surface how Group Investigation as another cooperative learning technique exists as beneficial and advantageous to improve students' writing. It helps boosting students' writing achievement, promotes open verbal interaction, and enables students to become resource persons for other students (Zingaro, 2008). So they can work together to maximize their own and each other learning.

Teaching Writing Using WPS to Students with High and Low Participation

The results show that there are significant improvements to students with high and low participation post-test scores. The mean score increase 1.819 points for students with low participation and 2.885 points for students with high participation. It means that WPS is effective to teach writing descriptive text to both students with high and low participation. This result is also supported by t count. Where t count is higher than t table, which means that H05 is rejected and Ha5 is accepted.

The results indicate that WPS gives positive effect to students' writing for both students with high and low participation because students need to complete a task by working together and ensuring that all team members have mastered the lesson. It also leads students to higher levels of thinking by exchanging and sharing information, reinforcing each other, giving feedback and having the responsibility for their tasks in group work. The study also showed that students with low participation gain more achievement than those high participation students. This can be explained from the point of

view that weaker students improve their performance when grouped with higher achieving students in a cooperative learning environment (Cohen, 1994).

Teaching Writing Using Group Investigation to Students with High and low Participation

Students pre-test and post-test mean scores show significant difference based on the statistical analysis for students with high and low participation who were taught by Group Investigation. Their post-test is better than pre-test. The mean score increases 3.09 points for students with high participation and 1.83 points for students with low participation. T count for them is also higher than t table. It means that H_0 is rejected and H_a is accepted.

The result represents that Group Investigation gives meaningful contribution to the students' writing both for students with high and low participation because it facilitates students to encourage each other to do their individual investigation and to learn how to work together to finish their group project or presentation so they can celebrate each other success (Killen, 2016:99).

The Interaction Effect among Teaching Strategy, and Students' Participation

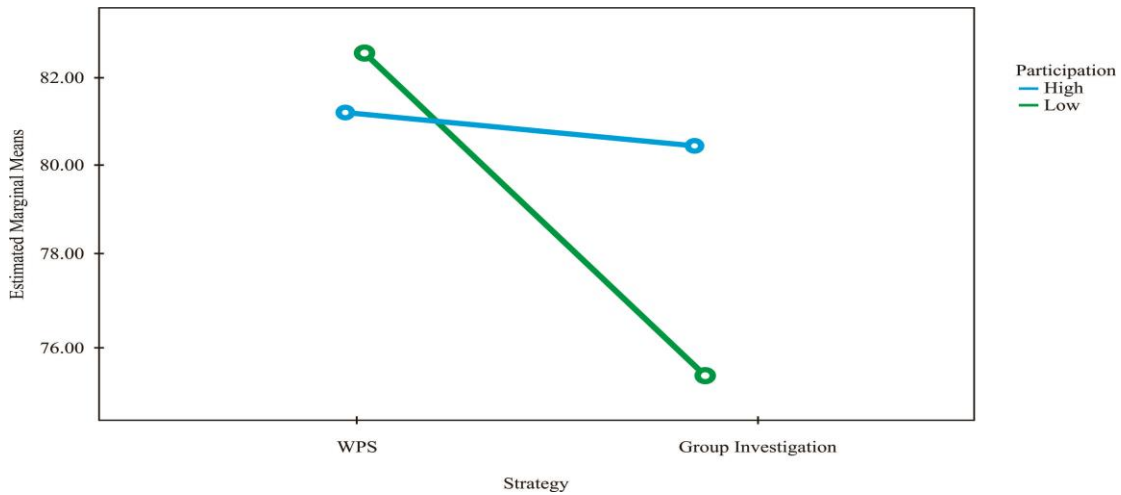
The implementation of WPS and Group Investigation to teach writing descriptive text cannot be taken away from the role of students' participation which is presented as moderator variable in this study. As a moderator variable which is able to strengthen or weaken students' writing. Students' participation becomes an important aspect to measure students' writing.

Students' participation is viewed as an important factor in undergraduate learning and is seen as facilitating active learning. It is widely claimed that students' participation in the classroom facilitates both acquisition of knowledge and development of problem solving skills. Students who participate highly in the classroom will learn the subject matter more effectively than students who do not participate (Murray and Lang, 1997).

In relation with the last research questions, this part discusses the interaction effect of teaching techniques and students' participation to students' writing achievement. The main point is to see whether students' writing achievement is purely improved because of the techniques, the existence of participation itself, or interaction between those variables. There is an interaction when the effect of one variable depends on the level of other variable (Field, 2005). So, if there is an interaction between two variables it means that those variables have a joint effect to the result. However, if there is no interaction, it means that, there is only individual influence from each variable or only one variable which has influence to the result.

The result reveals that there is effective interaction between teaching strategy and students' participation to teach writing descriptive text. It can be seen from the significant (Sig) score for strategy and category (interaction). The significance score for strategy and category (interaction) is 0.032 which is lower than the level of significance (α) = 0.05. It can be concluded that H_0 is rejected and H_a is accepted. It is also supported by the interaction graph which shows that there is intersection between the lines. To be said having an interaction, the two lines have a cross each other to create an intersection.

Thus, since there is intersection created by those two lines.



Picture 1. Estimated of Marginal Means of Writing Test

CONCLUSION

The findings of this study showed that both strategies are able to enhance students' ability in writing since there is an increment on their achievement after some treatments. The result of statistical analysis shows that post-test is always better than pre-test. In addition, the result shows that students in experimental group 1 (students who were taught with WPS) have better post-test scores than students from experimental group 2 (students who were taught with Group Investigation). It happened because students in experimental group 1 are basically better in writing than students in experimental group2. In other words Group Investigation is more appropriate for low achiever students, while WPS is better implemented to high achiever students.

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