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The Effect of Students' Writing Ability through Brainstorming Method towards English Learning Achievement in 2013 Curriculum

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Info Artikel

Abstract

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This study aims at examining the relationship between students' writing ability through brainstorming methods and English Learning Achievement in 2013 Curriculum. This research used an experimental method with the design of One Group Pretest Posttest Design. The total samples used in this study were 38 eleventh grade students in one Public Senior High School in Subang. The data were collected through tests and questionnaires. The result shows that Cronbach's Alpha value is .943. It shows the effectiveness of method and the students' writing ability. The result of pre-test is 51.13 and posttest average is 78.21. It is known that the Sig. (2-tailed) is $0.000 < 0.05$ which means that H_0 is rejected and H_a is accepted.

Keywords: Students' Writing Ability, Brainstorming, English Learning Achievement, Jamboard in Education 4.0 .

INTRODUCTION

The background and problems to be studied are students' writing abilities in one Public Senior High School in Subang. The ability to write is also very helpful as in it our thoughts and ideas are usually expressed in form of writing. Writing requires the complexity of activities to arrange essays properly because it involved a different way of thinking regulated and various requirements related

to writing techniques. These requirements are: 1) unity of ideas, 2) usage clear sentences, 3) well structure paragraphs, 4) application of rules correct spelling, and 5) mastery of adequate vocabulary.

As the time passes, the technology is important to develop our ideas. The researcher will be trying to collaborate using Jamboard in Education 4.0 application to learning Brainstorming in developing students' writing skill. This

method apply will increase ability comes from the students themselves, especially in increasing their writing ability. This means that students will not lose their ideas or plans because of arrange in the Brainstorming (using Jamboard in Education 4.0 application) in learning. This technique is very popular and is often used in other daily life activities such as solving problems. Brainstorming can be used to produce a plan, process, solution, or component approach and to generate an evaluation list of ideas.

Another element of writing skill is motivation. According to Maulida & Aminah (2020), students who have strong motivation will be enthusiastic in following the teaching and learning process. Therefore, wish a strong self-arises, no matter how difficult the learning material is then he will be happy in following the lesson. Not only that, writing skills can also make students become independent. According to Aminah & Maulida (2020) independent learning is very necessary developed in student learning patterns in schools to support success in learning, especially in English speaking skill.

The use of brainstorming is increasingly following the times, especially Indonesian education is required to follow technology 4.0. Therefore, the use of brainstorming here using an application that was created to resemble the brainstorm itself. Here the researcher tries to combine and use the application Jamboard who is none other than the descendant of Brainstorming itself, specially created to package the use of skills, ideas and suggestions which is automatically generated by the students in the study group. Therefore, this research is called brainstorming (Jamboard in Education 4.0) in learning. Writing skills are one type of skill language that students must master. With this ability, students are more motivated in developing what they

think is poured in the form of media. Writing is a series a complex activity process which of course requires stages so readers understand what content or ideas the author wrote. Writing is one of the activities to explore and develop an idea. It is started from the brain and then to show in write on a paper or another creative product. It is to show that English lesson has important meaning like others subject (Maulida, 2018).

The specific purpose of this research is to investigate the effect on writing skills using the Brainstorming method (Jamboard in Education 4.0) on students' English learning achievement in the 2013 curriculum in high school. This Brainstorming method (Jamboard in Education 4.0) is expected that students can have high motivation to learn so it will not only have an effect on writing skills but also affects improvement English learning. Today's learning needs to involve ICT, encourage self-regulated learning, and strong and positive character. In other words, it needs a synergetic and multi-faceted model of education. In this conjunction, the writer developed a synergetic multi-layered model, called SMELT I 4.0 DE, stands for Synergetic Multilayered English Language Teaching in Industry 4.0 and Disruption Era, consisting of ICTC (ICT cultivation), SRLI (Self-regulated Learning Inculcation), and TVCD (Transversal Competence Development), and CSM (the Curriculum Subject Matter). While studies of each layer of the model have been extensive, those of the layers in a synergetic whole may by no means be easy to find (Suherdi, 2019).

The urgency of research that students basically have ability in developing writing which is quite high if any desire to develop and explore writing activities. The using the Brainstorming method (Jamboard in Education 4.0) is expected that students will not lose their

ideas, ideas as well thoughts in finding, finding and developing inside information dig up the latest ideas. Thus, it is expected by the method Brainstorming (Jamboard in Education 4.0) students can improve in students' writing ability towards English learning achievement in the 2013 curriculum learning.

Writing has always regarded as an important skill in the teaching and learning English as a foreign Language (EFL). On the one hand, it stimulates thinking, compels students to concentrate and organized their ideas, and cultivates their ability to summarize, analyze, and criticize. On the other hand it reinforces learning in, thinking in, and reflecting on the (Maghsoudi, 2013). Writing activities are very important in the development of learning, especially English. Writing activities are emphasized for students to express ideas. Ideas and the development of creativity both in learning and in solving problems found. Therefore, it is needed in developing students' writing skills, because this writing activity must be trained, the more practice the students will get used to in developing writing activities.

Writing involves composing, developing and analyzing ideas, implying the ability to rephrase information in the form of narratives, or transforming information into new texts as in argumentative writing (Myles, 2002). In fact, however, both of these cases of following either their experience or ideology on writing might sometimes reflect aspects which have little relation with the nature of writing ability, as shown in (Yi, 2009). Important for the teacher to find out the solution for students' difficulties in writing English. The teachers should have the appropriate method to applied in their classroom in order to develop students' motivation to write their ideas. Teaching writing in the classroom are expected to help the students get the understanding by their experience in using

a word in appropriate context and tenses. Many methods and medium have been done in teaching learning writing for the students, one of them is the teacher let the students freed to write anything based on their experience (Aminah, 2018).

According to (Maghsoudi, 2013) mentions that when we learn brainstorms on his own, he will tend to produce a wider range of ideas that with group brainstorming-he or she does not have to worry about other people's egos or opinions and can therefore be more freely creative. He may not, however, develop ideas effectively as he does not have the experience of a group to help him. Individual brainstorming is best for generating many ideas, but tends to be less effective at developing them. Based on this opinion, it can be concluded that in developing ideas with brainstorming, it is better to do it in groups because it makes it easier to get ideas or suggestions, but even though it is used in individuals it is also good in developing suggestions and brainstorming ideas in developing writing ideas. In this activity, the use of brainstorming is done by using the Jamboard in education 4.0 application to make it easier for students to develop writing because in the application there are so many colors, lines can even develop ideas that are not only in the application.

In addition, the stages of writing: pre-writing, while writing, and post-writing are expected to contribute to strengthening students' thinking skills because they engage them in processes such as connecting, analyzing and evaluating ideas, a fact that leads to sharpening students thinking skills (Ibnian, 2011). Based on the opinion, in this strategy, indirectly guides students' hidden creative ideas in developing ideas, topics and developing paragraphs. Therefore, it is very suitable in developing students' writing skills in using brainstorming techniques.

Maghsoudi (2013) carried out a study on the impact of brainstorming strategies on Iranian EFL learners writing skill regarding their social class students. Results of the study provided the evidence that the instruction of brainstorming strategy had a positive effect on EFL learners writing improvement and also make them more active.

Brainstorming as one of the constructivist techniques was originally introduced by an American advertising executive, Alex Osborn (1953) as a technique of generating ideas from a group of people in an attempt to solve a problem. He established this strategy when he realized that the traditional modes of business meetings were unable to create new ideas. He also proposed the following four rules for effective brainstorming: (i) No criticism of ideas: During brainstorming, judgment or criticism of ideas is excluded until the end of the session. (ii) Encouraging large quantities of ideas: Quantity of ideas is the major goal of brainstorming. The more ideas the group or participants generate, the more the chance of having good ideas among them. (iii) Building on each other's ideas: Combination and improvement of ideas are very necessary. Participants should be very free to associate, build and elaborate their own ideas based on ideas from others. (iv) Encourage every idea: Take every idea (both silly and intelligent ones) as valid, and encourage the participants to share their ideas (Hidayanti et al., 2018).

The purpose of brainstorming is to guide people to new ways of thinking and break from the common way of reasoning. Brainstorming is the automatic act of note taking of ideas in preparation for different steps of writing (Hashempour et al., 2015). Brainstorming is a technique that encourages students to share their ideas about a topic. By using a single word or question, such as 'sound' or 'How sound is made?', you can ask the class to give you

any ideas that come into their heads (Ibnian, 2011) examined a study on the effect of using the brainstorming technique on essay writing in EFL class. Writing is one of the main skills required to start communication in any language, especially for non-native speakers (Hosseini et al., 2019). Writing is one of the productive skills which are paid much attention to, and it is widely accepted as a complex process for second language learners to achieve the perfect written tasks.

The significance of English writing skills has been intensively focused for long time, and the teaching and learning process in a writing class does not seem to enable students, especially in ESL/EFL writing contexts, to become more efficient writers. Additionally, the teaching approaches do little to enhance the overall quality of students' writing, so this is hard work required to improve both the quality of writing and writing instruction by means of commenting, suggesting, providing good quality feedback in an attempt to help learners effectively increase their writing competence (Kuyyogsuy, 2019).

METHODS

Place of the research is in one Public Senior High School Class XI in academic year 2020/2021 in Subang, West Java, Indonesia.

B. Methods of the Research

This study was characterized as a quantitative study using One Group Pretest-Posttest Design. According Sugiyono (Sugiyono, 2016) this technique of the research as bellow:

$$O_1 x O_2$$

Notes:

O1 = Pretest

X = Treatment (Using Brainstorming (Jamboard in Education 4.0)

O2 = Posttest

C. Population and Sample of the Research

The population in this study are in Public Senior High School Class XI in academic year 2020/2021 in Subang, West Java, Indonesia. Meanwhile, the sample at this research is a number of 38 people taken by Sampling Cluster Random Sampling). (Sugiyono, 2016) population this technique is used a sampling technique that provides equal opportunities for members of the population to be selected as members of the sample or random sampling. Therefore, the authors chose the random cluster sampling technique which determines the considerations or sample criteria used in this study.

E. Technique of the Collecting Data

1. Observation

Observation is a process of getting information in order to prove the truth of a study. This technique is used to obtain the application of Brainstorming method conducted by the researcher in the classroom. This observation is done by using teacher and student observation sheets to observe the activities of the teacher (researcher) and students in the learning process by using Brainstorming method, this is assisted by observers.

2. Questionnaire

The research will also use the questionnaire that consists by statements made by the researcher by referring to the concepts and then developed in the form of a grid and finally set in the form of statements. The assessment of the questionnaire used Likert scale. The purpose of the questionnaire is to review the result of teaching-learning process after students get the treatment, to review the use of teaching method and the improvement that can be evaluated by students.

3. Test

1. Pretest

The pretest will be given to the students before giving treatment. In order to know

the basic writing of the students, the researcher will give an oral test. The students were asked to answer the questions.

2. Treatment

This Treatment in the experimental class only, before doing a posttest this class given several treatments such as provide material by following the lesson plan and syllabus. In this treatment, students have been given training in the form of using writing using brainstorming (Jamboard in Education 4.0). the student should use (Jamboard in Education 4.0) to conceptualize ideas, by using steps of planning, composing, aligning, revising, and monitoring. Therefore, students can understand that they should develop their writing ability using (Jamboard in Education 4.0).

3. Posttest

The post-test was administrated to measure and compare the results of writing ability. In the posttest, the students are requested to answer some questions in the form of essay. Total of the questions is five items.

4. Instrument

1. Test

The writing test was arranged to measure the improvement of students' speaking skill before and after getting Brainstorming methods. The test consists of pretest and posttest. The pretest was intended to know the initial writing ability of the sample and posttest was intended to check the improvement of students' writing ability after getting the treatment.

2. Non-Test

The instrument used for this research is not only test but also non-test. The non-test instruments that will be used in this research are questionnaire, observation sheet, field notes, lesson plan and syllabus.

RESULT AND DISCUSSION

Validity and Reliability Test

According to our discussion that validity and reliability test used to identify value of Product Moment between items whom validity with score each item. The result of the score in the columns Correlated item - Total Correlation.

Tabel 3.1 Reliability Statistics

Reliability Statistics	
Cronbach's	
Alpha	N of Items
.943	20

Table 3.2 Item-Total Statistics

Item-Total Statistics				
	Corrected Item-Scale Mean if Deleted	Corrected Item Variance if Deleted	Corrected Total Correlation Item Deleted	Cronbach's Alpha if Deleted
Item_1	60.00	134.324	.683	.940
Item_2	60.03	136.729	.389	.947
Item_3	60.13	133.198	.630	.941
Item_4	59.79	131.522	.855	.937
Item_5	59.97	130.567	.871	.937
Item_6	59.97	130.567	.871	.937
Item_7	60.00	137.784	.692	.940
Item_8	59.97	130.567	.871	.937
Item_9	59.37	137.536	.433	.944
Item_10	59.82	131.722	.851	.937
Item_11	59.71	139.346	.429	.944
Item_12	60.24	137.861	.513	.942
Item_13	60.24	139.645	.421	.944
Item_14	59.87	136.658	.447	.945
Item_15	59.97	134.621	.834	.938
Item_16	60.08	137.750	.766	.940

Reliability Statistics

	Cronbach's			
	Alpha		N of Items	
Item_17	60.11	133.772	.769	.939
Item_18	59.97	130.567	.871	.937
Item_19	59.89	131.502	.934	.936
Item_20	59.87	136.658	.447	.945

Based on the tabel 3.1 show that value of Cronbach's Alpha is more 0,60 it is that the instrument of research of items is reliable. In this case, value of Cronbach's Alpha is 0.943. it is clear that variable instruments is reliable. To prove another fact is show that value of Cronbach's Alpha if Item Deleted to each items is more 0,60. It is show that the data is valid.

Hypothesis Test

After testing the normality and homogeneity of the data, the next step is to test the hypothesis. The test is carried out to generate problems from the research. In testing the data from the results of the pre-test and the final test to determine the effect of the treatment in each group, the Paired Sample t-test was used to determine whether there was a difference before and after being treated (treatment) of the students in Public Senior High School Class XI in academic year 2020/2021 in Subang, West Java, Indonesia.

1. Paired sample t-test
Table 3.3

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Pair Pretest	51.13	38	9.615	1.560
¹ Posttest	78.21	38	7.534	1.222

This research data was obtained through several series of tests, namely pre-test and post-test. The test is performed on 38 students of class XI in in Public Senior High School Class XI in academic year 2020/2021 in Subang, West Java, Indonesia. The calculation results it increases. For pretest the mean and for the posttest 51.13 and posttest it has an average of 78.21. The number of respondents used in the study was 38 students. The value of Std.Deviation is the pretest of 9,615 and the posttest of 7,534.

Table 3.4 Paired Sample Correlations

Paired Samples Correlations				
	N	Correlation	Sig.	
Pair 1 Pretest & Posttest	38	-.380	.019	

Based on the output value, the correlation coefficient value (correlation is -.380 with a significance value (sign.) of 0.019. The sig. 0.019 > 0.05 probability, it is show that there is no relationship between the pretest and posttest variables.

Table 3.5 Paired Sample Test

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair Pretest	51.13	38	9.615	1.560
¹ Posttest	78.21	38	7.534	1.222

Paired Differences

Mean	Std. Deviation	t	df	Sig. (2-tailed)
-27.079	14.293	-11.679	37	.000

Based on the table above that the mean in paired sample Test is -27,079, Std. Deviation is 14.293, Std. Error is 2.319, lower is -31.777, upper is -22.381, t is -11.679 and df is 37. It is known that the Sig. (2-tailed) is 0.000 < 0.05, then H₀ is rejected and H_a is accepted. Therefore, it assumed that there is a significant effect between before and after being given treatment on improving English learning achievement. It is mean that there is an average difference between the pre-test and post-test learning outcomes, which means that there is an effect of using learning strategies using the brainstorming method (Jamboard in Education 4.0) in improving student.

Result of Questionnaire

The researcher used a questionnaire to find out to collecting a data. It is result of questionnaire should be try on the respondent (Arikunto, n.d.). The researchers designed 10 closed items for the

questionnaire, which consisted of five components: students' learning attitude intrinsic motivation (5 items), and students' learning attitude extrinsic motivation (5 items),

The closed questions are based on a five-point Likert Scale. The five-point Likert scale was used in order to weigh each item in the questionnaire (1 = strongly disagree; 2 = disagree; 3 = unsure; 4 = agree; 5 = strongly agree).

The questionnaire given at the end of the lesson is during the post test. The result of questionnaire the table 3.7 above, as follow:

Table 3.7 The result of questionnaire

Category	Interval	F
Very High	88-100	19
High	71-87	13
Medium	54-70	4
Low	37-53	2
Very low	20-36	0

Based on table 3.7 showed that students fill the questionnaire as very high is 19, it is show that 19% of total respondent. Total high is 13, it is show that 13% of total respondent. Total of medium is 4, it is show 4% of total respondent. Total low is 2, it is show that 2% of total respondent. Total of very low is 0, it is show that 0% of total respondent

CONCLUSION

There is an effect of the brainstorming (Jamboard in Education 4.0 on English learning achievement in 2013 curriculum. It is known that mean of the prettest 51.13 and posttest it has an average of 78.21. There is an effect students' writing ability through brainstorming methods towards English learning achievement in 2013 curriculum. It is known that the Sig. (2-tailed) is $0.000 < 0.05$, then H_0 is rejected and H_a is accepted.

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