The Brainstorming as a Method to Improve Junior High School Students' Writing Skills

Edyson Baroes
edysonbaroes@jagakarsa.ac.id

Aleksandria Bangun
aleksandriabangun@jagakarsa.ac.id

Abstract

This research is a descriptive statistics research that aims to describe and explain the results of observations or experiments performed in the research, descriptive techniques used were selected based on the purpose of the statistics obtained. The research shows how the brainstorming method can be used to improve junior high school students' writing skills. Therefore, this research directly aims to determine students' abilities in mastering English vocabulary and students' mistakes in using English vocabulary in class VII of junior high school. The method used in this research is a description brainstorming. This research was conducted at SMP Purnama. In this research it was found that by using the brainstorming method the results of students' writing abilities are greater. Analysis has been carried out and obtained statistical evidence that a larger t_{count} of t_{table} (3.52 > 2.0399) which causes H_o is rejected and H_a accepted. It can be concluded that there are significant between students who use speech and communicative approach that does not use the communicative approach in eighth grade SMP Purnama.

Keywords: *Brainstorming, Vocabulary, English writing, and English Product*

INTRODUCTION

In the communication process, there are two types of ways to convey information with language: written and spoken. To carry out written communication, one must have good writing skills. In learning English, writing is one of the most important skills in English. By learning writing skills, the delivery of information can run smoothly. That is the reason why it is important to teach writing skills from an early age, especially at the school level. The main goal is for students to have good writing skills, in terms of understanding and mastering English.

Besides that, writing is also important for students to practice their skills and understanding of a material, how can they be able to convey their ideas in written form, and how to spell the world well; in this case the motivation and interest of students is needed so that the process of understanding becomes easier. Because English subject matter is very diverse, the teacher is obliged to choose the appropriate approach, strategy and method to achieve teaching goals easily, and the media will make students more motivated to learn. Teachers who are able to convey material easily will become student idols. Teachers can use several methods in the teaching and learning process to help students' understanding of the material being explained. In applying the method, the teacher must prepare many things such as; teaching materials, classroom management, and many other aspects because the use of inappropriate techniques can make it difficult for students to understand the teacher's explanation and that means the teacher can fail in teaching them.

Language teaching, in simple words, can be defined as an activity which is intended to result in language learning. It is assumed that language teaching is proposed to help people learn and use language. According to Dewey in Risk (1985: 6), "language teaching is the direction or guideline for learning. Learning, as everyone knows, refers to the acquisition of knowledge and skills. Based on this definition, language learning will be placed in the right definition as learning to have knowledge and skills in language.

Even though it can happen anywhere, almost all teaching and learning processes occur in the classroom. Tsui (1995: 1) defines a classroom as a place where more than two people gather for learning purposes, with one of them acting as a teacher. The classroom is not a place where the teacher just does a predetermined routine, but a place where various elements interact with each other. These elements are the teacher with his educational background, his students, experience, knowledge, and expectations as well as activities in the classroom.

Language learning occurs through meaningful interaction. Interaction, thus, will certainly involve students. In other words, it can be said that language learning is a two-way interaction between all elements in the classroom. These elements play an equally important role in deciding whether learning will achieve its goals or not. Each element cannot dominate the other. Teachers, then, play an important role in creating an atmosphere that stimulates students to participate in class. The teacher must also plan certain activities and interactions to achieve or produce certain behavioral outcomes.

In order for students to have a strong interest in the teaching and learning process, especially in learning to write, teachers must take the best approaches, methods and strategies. Then, teachers can use the media in teaching English, the methods used to help students write to create interaction between teachers and students. Furthermore, the teacher must prepare the tools that are of interest before the teaching and learning process is carried out. In student communication, language variations are used. In order to be more communicative and easier to understand in writing English, students add some connecting words or words. In this case, the researcher uses the brainstorming method as a method in the teaching and learning process.

Brainstorming is a method of gathering a large number of ideas from a group of people in a short amount of time. This method is often used in problem solving/creative problem solving and can be used alone or as part of other strategies. Brainstorming activities are useful for generating enthusiasm for learning and a fun atmosphere in group activities, as well as developing creative ideas for each student. This method is used to generate as many ideas as possible about a particular topic. Collecting a number of these ideas in the form of activity minutes will automatically improve students' writing skills.

Based on the description above, the researcher is interested in studying "Brainstorming as a Method for Improving Junior High School Students' Writing Skills". The issues raised are: How are students' English writing skills taught through the brainstorming method?; second, how are students' English writing skills taught through the lecture method?; and third, the ability to write English obtained from the brainstorming method is higher than the lecture method.

METHOD

In this research there are research variables which are everything that becomes the object of research. Furthermore, the performance of this research uses two research variables. the first is variable (X). Variable (x) can be understood as an independent variable that influences the appearance of symptoms. While the independent variable in this

research is the method used, namely the brainstorming method. Second, the dependent variable (Y) is a variable that is affected by the appearance of a symptom. The dependent variable in this research is fluency writing skills.

Then, students will be given two tests to obtain concrete data about students' writing abilities using the brainstorming method and conventional methods. Sources of data obtained from class VII students of SMP Purnama. The data collection technique used is a test. The test here is in the form of a narrative and in the form of multiple choice questions. The test was given to 40 students with a number of snippets of narrative text and 20 questions as research instruments. After getting a score or followed by the necessary data, then data processing is carried out.

The final test, which is also a research instrument, is a narrative text writing test consisting of 20 multiple choice questions. The ability to write English using brainstorming, students who are given tests is the level of absorption of students who receive instructions given experimentally. Writing skills in English using brainstorming strategies, students are given a test which is the result of the test after carrying out the final test. The grating tools in this research are as follows:

Variable	Dimensions	Indicator	Form	qu
Students' writing skill	Expression	Identify some expression; agreement and disagreement, showing attention, extending and ending conversation	Multiple chice	3,4 7,8 5,6
	Text	Identifying skind of the text; narrative, recount. Letter Advertisement	Multiple choice	1,2 9,1(13, 11,
	Vocabulary	Identify vocabulary related text	Multiple choice	16, 19,

The method used in this research is descriptive statistics. The use of this method is expected to explain the results of observations or experiments carried out in research, the descriptive techniques used are selected based on the statistical objectives obtained. Then, the data obtained will be measured with a measurement scale, as measurable observations, the raw data is grouped and then presented in the form of tables and graphs. The table is a value table and a frequency distribution table. All of the above data is processed by calculating the mean, median, mode, range and standard deviation. Before calculating the final stage of the t-test, a prerequisite test will be carried out first, namely conducting a normality test and data homogeneity test.

FINDINGS AND DISCUSSION

To find out the results of the test the writer made a table of student scores in each group. The results of the experimental group are tabulated and calculated in the following table. After obtaining the data, the researcher used an achievement test in the data collection process. The writer gave the test to the experimental group. Table below shows the results of the highest score of the experimental group was 96, the lowest score of the experimental group was 60. The total score of the experimental group was 3321. The average of the experimental group was 83.

The table below shows that the results of the experimental group are greater than the control group. The number of the experimental group was 3321 and the total score of the control group was 2641. The average of the experimental group was 83 and the average of the control group was 66. The result of the difference between the experimental class and the control class was 680.

No.	Name	Score (X_1)
1	Ade Rismawati	88

2	Agusti Faris	78	
3	Anisah Sasa Septiani	80	
4	Antoni Andrian	81	
5	Aryandi Eka putra	90	
6	Dani Wijaya	78	
7	Doohan Darmawan	79	
8	Dwi Rahmawati	70	
9	El Sandira Yolanda Yogiarto	82	
10	Elida Damahdah	78	
11	Fajar Andreansyah	80	
12	Husnul Hotimah Ihwani	83	
13	Ikmal Nawawi	63	
14	Indra Farma	95	
15	Kamelia Septiyani	86	
16	Marisa	87	
17	Maulana Misbah	78	
18	Muhammad Richo	88	
19	Muhammad Arie Pradana	87	
20	Muhammad Rifaldi	70	
21	Muhammad Rizal Pratja	69	
22	Muhammad Rizqi	75	
23	Mutia Hapsari	70	
24	Mutia Permata Sari	90	
25	Nur Aini	83	
26	Nur Azizah	81	
27	Nur Dhafia Nabila	76	
28	Oktari Nando	72	
29	Rania Putri Ananda	93	
30	Reza Bahtiar	80	
31	Rhidwan Triyadi	73	
32	Rico Adi Saputra	92	
33	Rika Afifah Handayani	91	
34	Riksmawati	81	
35	Rizki	84	
36	Rizki Yuana Pradita	81	
37	Saidi Ali Lubis	73	
38	Santi Amelia	85	
39	Shela Putri Rahayu	85	
40	Shelvy Nur Ramadzi	96	
	$\sum$	3321	

No.	Value of Variables X	Deviation from mean $(X_1 - \bar{x})$	Deviation from mean $(X_1 - \bar{x})^2$
1	88	5	25
2	78	-5	25
3	80	-3	9
4	81	-2	4
5	90	7	49
6	78	-5	25
7	79	-4	16
8	70	13	169
9	82	-1	1

No.	Value	Dev	Dev2
10	78	-5	25
11	80	-3	9
12	83	0	0
13	63	20	400
14	85	2	4
15	86	3	9
16	87	4	16
17	77	-6	36
18	76	-7	49
19	77	-6	36
20	70	-13	169
21	71	-12	144
22	75	-8	64
23	70	13	169
24	60	-23	529
25	80	-3	9
26	81	-2	4
27	76	-7	49
28	72	-11	121
29	70	-13	169
30	80	-3	9
31	73	-10	100
32	71	-12	144
33	72	-11	121
34	81	-2	4
35	84	1	1
36	81	-2	4
37	73	-10	100
38	85	3	9
39	85	3	9
40	96	13	169
			3004

The Table of Frequency Distribution Data

Description of Frequency Distribution Data of Increasing students' writing skill by using Brainstorming Method.

The score in Experimental Group

Calculating Range data with the formula:

R $= H - L$

$= 96 - 60$

$= 36$

Explanation:

H = Highest score

L = Lowest score

R = Range

Calculating classes (K) with the formula:

K $= 1 + 3{,}3 \log n$

$= 1 + 3{,}3 \log 40$

$= 1 + 3{,}3 (1.6)$

= 6.28

= 6

Calculating interval classes (I) with the formula:

I = $\frac{R}{K}$

= $\frac{36}{6}$

= 6

Interval	F
60 – 65	1
66 – 70	7
71 – 75	10
76 – 80	11
81 – 85	8
86 – 87	3
$\sum$	40

Table above shows that students who scored 63 – 68 is 1 student with CF is 1, scored 69 - 74 are 7 student with CF is 8, scored 75 - 80 are 10 students with CF is 18, scored 81 - 86 are 11 students with CF is 29, scored 87 - 92 are 8 students with CF is 37, and scored 93-98 are 3 student with CF is 40.

Mean, Median Modus, Deviation Standard

a) Mean (Me)

$\bar{x} = \frac{\sum x}{n}$

= $\frac{3321}{40}$

= 83

b) Median (Md)

63 69 70 70 70 72 73 73 75 76 78 78 78 78 79 80 80 80 81 81 81 81 82 83 83 84 85 85 86 87 87 88 88 90 90 91 92 93 95 96

Median = $\frac{81 + 81}{2}$

= 81

c) Modus (Mo)

$Mo = b + \left(\frac{b_1}{b_1 + b_2}\right) p$

= 80.5 + $\left[\frac{11}{}\right]$ x 6

11 + 1

= 80.5 + $\frac{11}{12}$ x 6

= 80.5 + (0.92) 6

= 80.5 + 5.52

= 86.02

d) Deviation standard for Experiment Class

$s = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n - 1}}$

= $\sqrt{\frac{3001}{40 - 1}}$

= $\sqrt{77.03}$

s = 8.78

The Data of Teaching Speaking by Using Conventional Method.

In this research the total score of the control group for student scores using conventional methods was 2641, and the average control group was 66. The table below shows that the highest score of the control group was 85. The lowest score of the control group was 49.

No.	Name	Score
1	Ahmad Rizki Mubarok	73
2	Albas Yusuf	62
3	Andhika	68
4	Arda Setianegara	65
5	Ardy Setiawan	60
6	Budi Setiawan	70
7	Dimas Vallencie	70
8	Distania Handiniti Argusandia	70
9	Eka Ayu Retno Ningsih	85
10	Eky Bryan Pangestu	63
11	Fani Safaatun Nisak	62
12	Farhan Firdaus	51
13	Fitri Melinda	49
14	Galuh Zakiyah Armanie	76
15	Herfi Liyanti	65
16	Hikmah Safitri	54
17	Indri Mulya	64
18	Kiki Setiawan	63
19	Muhamad Husni Syifa	78
20	Muhamad Yadi	79

21	Muhammad Abiyyu Daffa Iqbal	72
22	Muhammad Fahmi	74
23	Muhammad Rifky Arief Wichaksono	71
24	Muthmainnah	71
25	Nabila Pebriyanti	61
26	Nadian Salsabila	63
27	Nicha Anggia Ageng	64
28	Noer Kholifah Moti Fani	66
29	Nur Ajijah	47
30	Puspa Rianti	58
31	Putra Ada Yansyah	75
32	Putri Nurmala	64
33	Ravi Ilham Perdana	64
34	Rosmala Dewi	64
35	Salsabila Kamal Husaini	67
36	Siti Komala	61
37	Siti Nur Novianti	72
38	Siti Sara	63
39	Wahyuni Ambarwati	63
40	Willy Dimas Angga Nasrullah	74
	∑	2641

Table List of students writing value for control class

No.	Value of Variables X	Deviation from Mean $(X_1 - \bar{x})$	Deviation from Mean $(X_1 - \bar{x})^2$
1	73	7	49
2	62	-4	16
3	68	2	4
4	65	-1	1
5	60	-6	36
6	70	4	16
7	70	4	16
8	70	4	16
9	85	19	361
10	63	-3	9
11	62	-4	16
12	51	15	225
13	49	-17	289
14	76	10	100
15	65	1	1
16	54	-12	144
17	64	-2	4
18	63	-3	9
19	78	12	144
20	79	13	169
21	72	6	36
22	74	8	64
23	71	5	25
24	71	5	25
25	61	-5	25

26	63	-3	9
27	64	-2	4
28	66	0	0
29	62	-4	16
30	58	8	64
31	60	-6	81
32	64	-2	4
33	64	-2	4
34	64	-2	4
35	67	1	1
36	61	-5	25
37	72	6	36
38	63	-3	9
39	63	-3	9
40	74	8	64
∑	2641		2130

Table Data analysis for a control class

The Table of Frequency Distribution Data

Description of Frequency Distribution Data of Teaching Speaking by using Conventional method

The score in Control Group

Calculating Range data with the formula:

$R = H - L$
$= 85 - 49$
$= 36$

Calculating classes (K) with the formula:

$K = 1 + 3,3 \log n$
$= 1 + 3,3 \log 40$
$= 1 + 3,3 (1.6)$
$= 6.28$
$= 6$

Calculating interval classes (I) with the formula:

$I = \dfrac{R}{K} = \dfrac{36}{6} = 6$

Interval	F
49 – 54	3
55 – 60	3
61 – 66	18
67 – 72	9
73 – 79	6
80 – 85	1
∑	40

The table above shows that students who score 49 – 54 total 3 students with CF 3, scores 55 - 60 total 3 students

with CF 6, scores 61 - 66 total 18 students with CF 24, scores 67 - 72 total 9 students with CF 33, score 73 - 79 there are 6 students with CF 39, and scores 80 - 85 there is 1 student with CF 40.

Mean, Median Modus, Deviation Standard

a) Mean (Me)

$$\bar{x} = \frac{\sum x}{n}$$

$$= \frac{2641}{40}$$

$$= 66$$

b) Median (Md)

49 51 54 58 60 60 61 61 62 62 62 63 63 63
63 63 64 64 64 64 64 65 65 66 67 68 70 70
70 71 71 72 72 73 74 74 76 78 79 85

$$\text{Median} = \frac{64 + 64}{2}$$

$$= 64$$

c) Modus (Mo)

$$Mo = b + \left(\frac{b_1}{b_1 + b_2}\right)p$$

$$= 60.5 + \frac{18}{18 + 15} \quad x \quad 6$$

$$= 60.5 + (0.54)\,6$$

$$= 60.5 + 3.24$$

$$= 63.74$$

d) Deviation standard for Control Class

$$s = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n - 1}}$$

$$= \sqrt{\frac{2130}{40 - 1}}$$

$$= \sqrt{54.62}$$

$$s = 7.39$$

Hypothesis Testing

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\dfrac{s_1^2}{n_1} + \dfrac{s_2^2}{n_2}}}$$

$$t = \frac{83 - 66}{\sqrt{\dfrac{(8.8)^2}{40} + \dfrac{(8.28)^2}{40}}}$$

$$= \frac{17}{\sqrt{\dfrac{77.44}{40} + \dfrac{68.56}{40}}}$$

$$= \frac{17}{\sqrt{1.94 + 1.7}}$$

$$= \frac{17}{\sqrt{3.64}}$$

$$= \frac{17}{1.91}$$

$$= 8.89$$

Discussion of Results of Hypothesis Testing

Based on the above calculation and obtained t_{count} 8.89 with degrees of freedom (df) 58 and 5% significance level obtained t_{table} 2.001, so t_{count} higher than t_{table} (8.89 > 2.001). It can be concluded that the *null* hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. So it can be said that the writing skills of students who are taught by the brainstorming method are better than students who are taught by conventional methods.

CONCLUSION

Based on the results of hypothesis testing, there is a very large influence on students' writing skills in the experimental class using the brainstorming method compared to the conventional class. The data shows that by using the brainstorming method the results of students' writing abilities are greater. Analysis has been carried out and obtained statistical evidence that a larger t_{count} of t_{table} (3.52 > 2.0399) which causes Ho is rejected and Ha accepted. It can be concluded that there are significant between students who use speech and communicative approach that does not

Baroes, Bangun, "*The Brainstorming as a Method to Improve Junior High School Students' Writing Skills*"

use the communicative approach in eighth grade SMP Purnama.

REFERENCES

Biesta, G. J. (2017). *The rediscovery of teaching*. Routledge.

Jo McDonough and Christoper Shaw. (2003). *Materials and Methods in ELT*. USA : Blackwell Publishing

Suryawati, E., & Osman, K. (2017). *Contextual learning: Innovative approach towards the development of students' scientific attitude and natural science performance*. Eurasia Journal of mathematics, science and technology education, 14(1), 61-76.

Tsagari, D., & Vogt, K. (2017). *Assessment literacy of foreign language teachers around Europe: Research, challenges and future prospects*. Papers in Language Testing and Assessment, 6(1), 41-63.

. Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). *A systematic review of English medium instruction in higher education*. Language teaching, 51(1), 36-76.

Petocz, P., Reid, A., & Gal, I. (2018). *Statistics education research*. International handbook of research in statistics education, 71-99.

Sugiyono. (2007). *Statistika untuk Penelitian*. Bandung : Alfabeta.

Suparlan. (2011). *Tanya Jawab Pengembangan Kurikulum dan Materi Pembelajaran (Curriculum & Learning Material Development)*. Jakarta : Bumi Aksara.

Tilfarlioglu, F. Y., & Anwer, J. K. (2017). *Integration of Lean Method in English Language Teaching and Learning: A New Perspective*. Journal of Education and Training Studies, 5(9), 230-237.

Wild, C. J., Utts, J. M., & Horton, N. J. (2018). *What is statistics?*. International handbook of research in statistics education, 5-36.