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Implementation of Brainwriting Strategy in Improving Writing Skill at the Tenth Grade Students of MA Putri Aisyiyah Palu

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Article Info	ABSTRACT
	This research intends to find out whether brainwriting strategy can improve writing skills of the tenth-grade students of MA Putri Aisyiyah Palu or not. The sample selected was using total sampling techniques. The researchers applied the pre-experimental design. The results of the pre-test of the mean score are 55.17. The results of the post-test of the mean score are 68. After delivering test, the data obtained indicate an improvement in mean score of students' tests. The testing hypothesis is conducted to df = n-1 out whether this improvement is significant or not by comparing t-counted 10.68 to t-table 1,745 (df= 16 and α=0,05). The result shows that the t-counted is higher than the t-table, so the hypothesis is accepted. In other words, the Brainwriting Strategy can improve students' writing skills in tenth-grade MA Putri Aisyiyah Palu effectively.

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INTRODUCTION

Writing is a powerful medium that allowed individuals to communicate their thoughts, ideas, and opinions through a series of sentences. The expressions can be used to convey complex emotions, inspiration, and sharing knowledge with others. As Mulyadi et al., 2021 assumed that writing is as a productive skill that can communicate with others or express their notion or idea through written test other than orally.

Taking into account writing elements, there were several obstacles to make good writing. The obstacles for students dealt with inadequacy of material or inexperience to write, lack of vocabulary in writing, loss of ability to compose paragraphs, and hesitation for selecting topics and elaborating their thought. As a result, students got stuck in process of writing. These problems took place in MA Putri Aisyiyah Palu. The researchers conducted a preliminary observation at MA Putri Aisyiyah Palu and found out the students' problems in writing. It was not easy for them to explore their notions in writing. They cannot master grammar and could not develop a topic given by the teacher. It was supported by statement of Nalliveettil, G.M (2017) that the phobia of making grammatical errors often hinders their progress leading to a written discourse that is illogical to a given writing activity.

Besides that, in the process of teaching-learning, the teacher just gave exercise to the students such as making simple paragraph but do not explain them clearly and make them not recognise for making a simple paragraph. So, Mulyadi et al., (2019) states that the most crucial problem is that teachers lack an effective strategy to teach English writing skills. It means teacher has not discovered proper strategy in writing skill.

In writing, lot of students might convey their ideas, emotions, thoughts, desires, and experiences written to the readers, but there are also the students who could not depict them in written form. It is not a sentence. It needs main sentence. Writing components include language use, paragraph organization, and vocabulary. Mechanics of writing are necessary for making good writing namely: punctuation, capitalization, spelling, cohesion, unity, and organization. The elements are really significant to be held by the students in supporting the writing to be good writing.

One effective way to enhance the learning experience and ensure active class participation is adopted various techniques. Brainwriting is a popular method that encouraged every participant to jot down their thoughts or ideas on a specific question or topic without verbal communication. Allowed by each individual to put their ideas on paper, it provides a level playing field for everyone to contribute equally. After a few minutes, the participants exchanged their notes, and each person builds upon the other's ideas. This technique didn't only generate more innovative and diverse ideas but also fosters teamwork and collaboration among the students. So, the importance of brainwriting techniques is to motivate students to enjoy writing, to improve their ability to express clear ideas and to improve the quality of writing.

As argued by Michalko (2007: 77) in (Oktavia, Martono, and Wartiningsih, 2016), stated brainswriting strategy is a strategy used by the teacher in writing. This approach is quite similar to brainstorming in many ways. Based on Rodrigues (2008), in the classroom, the brainwriting strategy can be an effective way for students to share their knowledge about a subject without the fear of being incorrect.

Derived from the problems, the researchers prepared a research question as follows: can the brainwriting strategy effective in improving the writing skills of the tenth grade students of MA Putri Aisyiyah Palu?. The aim of the study was to determine whether a brainwriting strategy can improve writing skill of the tenth-grade students of MA Putri Aisyiyah Palu.

The study results have a positive impact on developing the writing quality of teachers, students, and researchers themselves. By adopting the strategy, teachers can inject a spark of creativity into their writing instruction, enhancing student abilities. For students; by implementing this strategy in the classroom, it can help students develop their writing skills in a way that encourages imaginative expression and critical thinking. Meanwhile, for the researchers themselves, the research can be useful for future researchers by becoming a guide in developing writing skill in creativity and critical thinking.

The hypothesis of this research was brainwriting strategy can improve writing skill of the tenth-grade students of MA Putri Aisyiyah Palu. This study concerned on descriptive text writing skills using brainwriting strategy to improve writing skills of tenth-grade students at MA Putri Aisyiyah Palu

As argued by Haryadi. H, (2020) it seems that the teacher is using the brainwriting strategy for writing tasks. This approach is quite similar to brainstorming in many ways. In the classroom, the brainwriting strategy can be an effective way for students to share their knowledge about a subject without the fear of being incorrect. Researcher has looked into this strategy due to the lack of ability of students to write simple stories in school. To overcome this challenge and enhance students' short story writing skills, an alternative learning model has proposed that uses brainwriting techniques to encourage student creativity.

Brainwriting is a learning technique intended to create better writing skills through brainwriting strategies such as learning to write short descriptive explore potency and develop student creativity. The researchers took the research to increase students' ability, especially in writing.

Literature Review
The Nature of Writing

Writing is more than just a physical activity - it also reflects a person's mental state, according to Martha and Situmorang (2018). Through writing, people can express their thoughts, ideas, and feelings. It is a collaborative process that allows individuals to convey meaning through the written word. Writing is a skill that can be learned and improved with practice.

Previous Study

A study conducted by Pratomo, A., (2013). The study result was found that using brainwriting techniques can enhance students' expository narrative writing skills. He conducted this research using brain writing techniques. "He conducted this research for the title 'Improving Expository Narrative Writing Skills with Brain Writing Techniques for Class X students of SMK Ma'arif 4 Kebumen'."He conducted this research using brainwriting techniques. According to his research, the use of brainwriting techniques can enhance students' writing abilities. The data analysis and subsequent discussion revealed that the expository writing skills of class X students at SMK Ma'arif 4 Kebumen improved significantly with the implementation through these techniques, resulting in a well classification.

Relating to the strategy used in the research, Azizah (2015) conducted a study titled "Effectiveness of Brainwriting Techniques in Learning to Produce Explanatory Text in Class VII Students of SMP Negeri 1 Sewon, Bantul, DIY." The study conducted at SMP N 1 Sewon Bantul aimed to evaluate the efficacy of

brainwriting techniques in learning to produce explanatory texts. The finding of the study revealed that brainwriting strategies were found to be effective in aiding students to produce explanatory texts.

The researcher has concluded that the two previous studies have similarities in improving writing skills. However, the contrast between those studies and the current research lies in the research object. The current study was conducted by researcher in the Class X MA Putri Aisyiyah Palu.

Brainwriting Strategy

Brainwriting is a method of stimulating creativity and accelerating the innovation process by means of writing. According to Sinaga, et. all. (2022), brainwriting consist of involves participants quickly creating ideas by writing them down and exchanging written thoughts within a group, which is regarde more effective than verbalizing ideas in brainstorming. This strategy can be applied as a learning strategy to improve writing skills by facilitating idea generation through written expression and encouraging interaction among students.

METHOD OF THE RESEARCH

A pre-experimental research method was applied in the research. The researchers used the one group pre-test and post-test design. Before applying the treatment in using brainwriting technique, she did the pre-test. Then the post-test was conducted after treatment. The design of the research was proposed by Ary, D., et.all. (2010) in the following:

Design 1. The one group pre-test – The post-test design

Pre-test	Treatment	Post-test
Y1	X	Y2

Where:

Y1 = The Pre-test
X = The Treatment
Y2 = The Post-test

According to Husna and Multazim (2019), in scoring students writing paragraphs should use the scoring rubric format, punctuation and mechanics, content, organization, and grammar. It could be shown descriptively with the scoring rubric of Jacob. The profiles of scoring are based on Weigle (2002) below:

Table 2. Scoring Rubric of Writing Evaluation

Aspect of Scoring Writing Ability	Score	Level	Criteria
Content	27	Excellent to very good	Through development of paragraph unity relevant to topic, topic sentence concluding sentence
	22	Good to average	Limited development of paragraph unity mostly relevant to topic but lacks detail
	17	Fair to poor	Limited knowledge of paragraph inadequate development of topic
	13	Very poor	Does not show knowledge of paragraph not enough to evaluate
Organization	18	Excellent to very good	Well organized clearly stated cohesive
	17-14	Good to average	Limited supported idea logical but incomplete sequencing
	13-1-0	Fair to poor	Non fluent ideas confused lack

			logical developing
	9-7	Very poor	Does not communicate not enough to evaluate
Vocabulary	20-18	Excellent to very good	Effective word usage word from mastery
	17-14	Good to average	Adequate range error of word from
	13-10	Fair to poor	Limited range frequent errors of word from
	9-7	Very poor	Essentially translation little knowledge of English vocabulary errors word form
Grammar	25-22	Excellent to very good	Effective complex construction word offer function articles pronouns preposition
	21-18	Good to average	Effective but simple construction several errors of agreement tense, articles pronouns, and prepositions but meaning seldom obscured
	17-11	Fair to poor	Simple frequent errors of tense, word function articles pronoun and preposition meaning confused
	10-5	Very poor	No mastery of constructions dominated by errors does not communicate not enough to evaluate
Mechanics	5	Excellent to very good	Mastery of conventions few errors of spelling, punctuation and also capitalization
	4	Good to average	Occasional errors of spelling, punctuation, capitalization meaning not obscured
	3	Fair to poor	Frequent errors of spelling, punctuation, capitalization and paragraph meaning confused
	2	Very poor	No mastery of conventions dominated by errors not enough to evaluate

source: Weigle, J. (2002)

The researchers analysed the data by using statistical analysis. It was used to analyse the results both of test (pre-test and post-test). Then The researchers counted the individual score by using the formula

recommended by Arikunto (2006):

∑ = x/n x100

Where:
∑ = Standard score
X = Sum of correct answer
N = Maximum score
100 = Fixed score

To find out the students of the mean score, she used formula quoted from Arikunto (2002) as follows:

$$M = (\sum x)/n$$

Where:
M = Mean score
∑ = Sum of score
X = Score in a distribution

Next, The researchers calculated the students' mean deviation by using formula proposed by Sudijono (2012) as following:

$$MD = (\sum d)/n$$

Where:
MD = Mean deviation between pre-test and post-test
∑d = The summary of deviation
N = Number of students

However, before analysing the t-counted, the researchers will compute the formula of the sum of squared deviation as follows:

$$\sum x^2 d = \sum d^2 - \frac{(\sum d)^2}{N}$$

Where:
∑x² d = the sum squared deviation
∑d² = the sum of deviation
N = number of students

After getting the mean score of the pre-test and post-test, The researchers tested the hypothesis then analyse the effectiveness of the treatment by using the formula proposed by Arikunto (2010) as following:

$$t = \frac{MD}{\sqrt{\frac{\sum x2d}{n\,(n-1)}}}$$

Where:
t = the value of t-counted
MD = the mean deviation of pre-test and post-test difference
∑x² d = the sum of square deviation
N = Number of students

RESULT

The researchers offered tests as a primary tool for collecting data from students. The pre-test and the post-test were applied by The researchers in it. The researchers utilized tests to evaluate students' prior knowledge and performance in comprehending current issues. The pre-test was administered to determine the students' writing comprehension skills before doing treatment. The post-test was carried out to find out whether students' writing skills had improved after being given treatment. The researchers conducted a test to measure students' writing skill.

The Pre-test of class tenth grade MA Putri Aisyiyah Palu was conducted on April 29, 2024. The pre-test result was presented in the following table:

Table 3. The Result of the Pre-test

No.	Students	C	O	V	G	M	Obtained Score	Max Score	Student's Score
1.	APA	13	14	10	18	2	57	100	57
2.	AR	27	10	10	11	4	62	100	62
3.	D	13	7	10	10	3	43	100	43
4.	FD	27	13	13	11	4	67	100	67

No.									
5.	H	13	7	10	17	2	49	100	49
6.	I	13	7	7	5	2	34	100	34
7.	K	13	7	10	17	2	49	100	49
8.	NF	28	17	14	11	2	72	100	72
9.	NA	21	13	13	17	3	67	100	67
10.	NW	21	13	14	11	2	61	100	61
11.	RSS	17	14	14	18	2	65	100	65
12.	S	13	10	10	17	3	53	100	53
13.	U	21	13	14	11	2	61	100	61
14.	W	13	7	10	17	2	49	100	49
15.	WM	13	8	10	7	3	41	100	41
16.	Y	16	9	10	6	2	43	100	43
17.	Z	22	10	14	15	4	65	100	65
	Total								938

As written on the table, 72 is the highest score and 34 is the lowest score. Calculating the total score of the students was already done then The researchers later determined the students of the mean score by using the formula below:

$M = \frac{\Sigma x}{N}$

$M = \frac{938}{17}$

$M = 55.17$

The students of the tenth grade MA Putri Aisyiyah Palu post-test were conducted on May 27,2024. The following table displays the class's results:

Table 4. The Result of the Post-test

No.	Students	C	O	V	G	M	Obtained Score	Max Score	Student's Score
1.	APA	16	13	14	10	3	56	100	56
2.	AR	26	17	17	21	4	85	100	85
3.	D	17	13	13	18	4	65	100	65
4.	FD	21	13	13	17	2	66	100	66
5.	H	17	13	13	18	3	64	100	64
6.	I	21	13	13	21	4	72	100	72
7.	K	21	13	13	21	2	70	100	70
8.	NF	28	17	14	20	3	82	100	82
9.	NA	21	13	13	17	3	67	100	67
10.	NW	21	13	14	18	3	60	100	60
11.	RSS	27	14	14	23	3	81	100	81
12.	S	20	14	12	18	3	67	100	67
13.	U	17	13	14	13	3	60	100	60
14.	W	21	13	13	21	2	70	100	70
15.	WM	17	9	13	17	2	58	100	58
16.	Y	18	13	10	15	2	61	100	61

| 17. | Z | 22 | 13 | 14 | 21 | 2 | 72 | 100 | 72 |
| | Total | | | | | | | | 115.6 |

After calculating the post-test result of the students, the highest score is 85 then the lowest score is 56. Next, she calculated the mean score by using the formula below:

M= $\frac{\sum x}{N}$

M= $\frac{115.6}{17}$

M= 68

The post-test mean score of 68 demonstrates a clear and significant improvement in the students' descriptive text writing abilities in distinction to the pre-test mean score of 55.17.

The mean score of the students both the pre-test and the post-test done, The researchers counted the deviation and the square deviation of the students' score on the pre-test and the post-test as shown in the following table:

Table 5. The Result of Deviation Pre-test and Post-test

No. T	Students	Pre-test (Y1)	Post-test (Y2)	Deviation (d) (Y2-Y1)	Square Deviation (d2)
1	APA	57	56	-1	-2
2	AR	62	85	23	46
3	D	43	65	22	44
4	FD	67	66	-1	-2
5	H	49	64	15	30
6	I	34	72	38	76
7	K	49	70	21	42
8	NF	72	82	10	20
9	NA	67	67	0	0
10	NW	61	60	-1	-2
11	RSS	65	81	16	32
12	S	53	67	14	28
13	U	61	60	-1	-2
14	W	49	70	21	42
15	WM	41	58	17	34
16	Y	43	61	18	36
16	Z	65	72	7	14
	TOTAL			218	436

The researchers used the formula of the mean deviation score below:

Md $= \frac{\sum d}{N}$

Md $= \frac{218}{17}$

Md $= 12.82$

The mean deviation score of pre-test and post-test was 12.82.

The result of mean deviation score of the pre-test and the post-test was 12.82. Later, The researchers counted the sum of squared deviation in following:

$$\sum x^2 d = \sum d^2 - (\frac{\sum d}{n})^2$$

$$\sum x^2 d = 436 - (\frac{218}{17})^2$$

= 436 - 2.79

= 433.21

Furthermore, The researchers used the t-test formula to analyze the significance of the difference between the pre-test and post-test.

Moreover, The researchers operated the formula of the t-test in order to analyze the significance of distinction between the pre-test and the post-test score. The calculation was as follows:

$$t = \frac{MD}{\sqrt{\frac{\sum x2d}{n\,(n-1)}}}$$

$$t = \frac{12.82}{\sqrt{\frac{433.21}{17(17-1)}}}$$

$$t = \frac{12.82}{\sqrt{\frac{433.21}{17(16)}}}$$

$$t = \frac{12.82}{\sqrt{\frac{433.21}{272}}}$$

$$t = \frac{12.82}{\sqrt{1.59}}$$

$$t = \frac{12.82}{1.2}$$

t - counted = 10.68

Based on the result of t-counted calculation, the researchers noticed that the significance of difference between the pre-test and the post-test result gained 10.68.

DISCUSSION

The use brainwriting can give significant improvement to the students in enhancing the writing skill of the students by showing the pre-test and the post-test scores. The tests result was analyzed in applying statistical formula. Dealing with the result of pre-test, only one student passed the test. The standard score for English subject at the school was 100. By observing the result of pre-test, the researchers concluded that the students did not realize well how to write descriptive text. There were some obstacles that students faced in their writing. First problem is lack of vocabulary. This makes it heavy for students to construct and elaborate their ideas. Second, they did not handle the construction of grammatical sentences well. Third, they still did not understand how to use spelling in the sentence. Therefore, they always produce sentences that are inaccurately. Dealing with the problems, the researchers applied brainwriting strategy to find solution from the problems detected.

The investigation was carried out on April 29th, 2024, consisting of the pre-test administered to tenth-grade students. Following the pre-test, the study proceeded with the treatment phase. In the beginning session, the researchers began by greeting with the students and introduced herself. The first treatment session focused on instructing the students about the simple present tense, emphasizing its relevance in composing descriptive texts. Subsequently, they elucidates the structure of descriptive texts.

The second treatment, she taught the students about elements of paragraph, various kinds of conjunctions, and how to put punctuation in the sentence. During the final treatment session, they explained the brainwriting strategy and its implementation in asking the student write through descriptive texts.

After the students did treatment throughout each meeting, The researchers conducted the post-test to assess the improvement in students' ability to write descriptive text using the brainwriting strategy. Out of the total students, 13 (76.47%) passed the test, while only 4 students (23.53%) failed. By comparing the results of the pre-test and post-test, there is an improvement. The result shows that the t-counted (10.68) is higher than the t-table (1,745), so the Alternative hypothesis is accepted. In other words, the Brainwriting Strategy can improve students' writing skills in tenth-grade MA Putri Aisyiyah Palu effectively.

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