THE EFFECT OF USING MIND MAPPING AND THINK TALL WRITE TECHNIQUES IN TEACHING WRITING SKILL

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ABSTRACT

This research aims to find out the effect of using Mind Mapping and Think-Talk-Write techniques and to determine the more effective technique in teaching writing. The method used was quantitative with a quasi-experimental design. The population of this research was the tenth-grade students at Senior High School 3 Pinrang in academic 2020/2021. The total number of populations was 325 students. The sample was chosen purposively; 20 students from Class X MIPA 2 were selected as the experimental class, and 20 students from X MIPA 3 as the controlled class. The instrument for collecting data was a writing test focused on describing self-introduction, traditional food, and tourist place. The findings showed that Mind Mapping and Think-Talk-Write techniques improved the students' descriptive text writing. Still, the Mind Mapping technique significantly improved in the experimental class. Therefore, using the Mind Mapping technique is recommended to teach descriptive writing.

Keywords: Writing Skill, Mind Mapping, Think-Talk-Write

INTRODUCTION

Language is a mental ability system to reveal ideas by speech sounds combined into words. Human being demand language to deliver mind, and social control, and communicate both spoken and written with others. The most prominent language is English. As a global language, English is the most widely used and compulsory subject at schools in many countries.

In Indonesia, Learning English has been taught from basic education to higher education which is expected to improve students' ability to communicate in English. English is generally taught and assessed in terms of the four skills: listening, speaking, reading, and

writing. These four skills are related and integrated closely with each other. Listening and reading are receptive skills, while speaking and writing are well-known as productive skills. The students have different achievements in these skills; some have better achievements in a certain skill, and others have better achievements in another.

According to Walsh (2010), writing skill is essential because it is used extensively in education and the workplace. If students do not know how to express themselves in writing, they will not be able to communicate well with professors, employers, peers, or just about anyone else. Much professional communication is done in writing: proposals, memos, reports, applications, preliminary interviews, e-mails, and more are part of the daily life of a college student or successful graduate. Therefore, students must understand writing rules before expressing themselves in writing. Those who are masters of writing skills would be able to read what they have written and deliver the meaning to the readers.

Writing has been mentioned by Allah in His holy Qur'an at Surah Al-Alaq verses 4-5 as follows:

الَّذِيْ عَلَّمَ بِالْقَلَمِ ٤ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ ٥

"Who taught by the pen. He has taught man that which he knows not."(Q.S Al-Alaq/96:4-5)

Based on Quraish Shihab's interpretation in Daroni (2018), writing is very important in the development of science. After writing, the knowledge can be inherited by the next generation so that the next generation can continue and develop further the knowledge pioneered by the previous generation.

In the 2013 curriculum used in senior high school, students must achieve spoken and written communicative competence, which means students can communicate well. Based on the competency's standard of the syllabus, some types of writing text must be taught in Senior High School. It consists of descriptive, recount, procedure, narrative, and explanatory text. The researchers focused on one type of writing text, descriptive text. Based on the syllabus and relevant book in the first semester of the tenth grade of senior high school, the students must study descriptive text. According to Hawa (2009), descriptive text is a text which says what a person or a thing is like. A description is used in all forms of writing to create a vivid impression of a person, place, object, or event. It can be inferred that descriptive text is a way of writing to create a particular mood or atmosphere or describe a place so that the reader can create vivid pictures of characters, places, objects, etc.

There are two techniques that can be used to teach writing; namely, Mind Mapping and Think-Talk-Write techniques. According to Buzan (1993:59), Mind Mapping is a powerful

graphic technique that provides a universal key to unlocking the brain's potential. It is different from usual note-making. Meanwhile, according to Hamdayama (2011: 218), Think-Talk-Write starts with thinking through the materials the teacher gave, then communicating the solutions through discussion and presentation and finally writing the result.

The researchers did preliminary research in August 2020 on tenth-grade students of Senior High School 3 Pinrang. Reaching from the preliminary research, the researcher found some problems with students' writing skills, especially in writing descriptive text. Some factors influenced those problems: Firstly, students' felt it was difficult to explore ideas which caused their paragraphs were not clear and their sentences to be not organized. *Secondly*, the students had limitations in vocabulary and grammar. *Thirdly*, because of the monotonous technique, the students always feel bored and sleepy when they learn writing materials.

Based on the preliminary research on tenth-grade students of Senior High School 3 Pinrang, they need to be introduced to other writing techniques to improve their writing. The two techniques that can be used to teach writing are Mind Mapping, and Think-Talk-Write techniques. Teaching writing, especially descriptive text, is very interesting using those techniques. Therefore, this research aims to find out the effect of using Mind Mapping technique and Think-Talk-Write in teaching descriptive text.

REVIEW OF LITERATURE

Related Research Findings

Indra (2013) conducted research entitled *The Use Mind Mapping Strategy to Improve Students' Ability in Writing Procedure Text.* This research focused on improving students' ability to write procedure text using Mind Mapping. The method used was classroom action research (CAR). The population was the tenth-grade students at Senior High School 1 Susukan. The research instruments were a writing test, questionnaire, and observation checklist. The data analysis result showed a significant influence of using Mind Mapping to improve students' ability in writing procedure text.

Yuliani (2016) conducted research entitled *A Comparative Study on Think-Talk-Write and Guided Writing Techniques in Teaching Writing*. This study was experimental research and used a quasi-experimental design that applied. The number of samples of this research was 80 seventh-grade students of Junior High Scholl 1 Kaliori. The data of this research were obtained using a writing test. The writing tests in this study consisted of the pre-test and the post-test.

Utami (2018) conducted research entitled *A Comparative Study between the Use of Think Talk Strategy and Lecturing Method in Teaching Writing Narrative Text at the Eight Grade of MTsN Surakarta 1 in the Academic Year 2017/2018.* This research design used was a comparative method. The total sample was 76 students in Eight Grade of MTsN Surakarta 1. The data of this research were obtained using a writing test. The writing tests in this study consisted of the pre-test and the post-test.

Hikmawati (2017) conducted research entitled *The Implementation of Think-Talk-Write Strategy to Improve the Students' Writing Skills.* The study's objective is to know the improvement before and after using the Think-Talk-Write strategy. The research design used was classroom action research. The researcher applied tests, namely pre-test and post-test. She implemented two cycles. Each consisted of planning, implementation of the action, observation, and reflection.

This research is related to those related research findings. Those researchers applied Mind Mapping, and Think-Talk-Write techniques in teaching writing skills, while this research used both Mind Mapping and Think-Talk-Write techniques. This research only focused on one kind of text, namely descriptive text.

Definition of Writing

Writing is a form of expressing an idea, thought, or feeling. Based on Wijayatiningsih (2013:564), writing is a product concept from the writer's command of grammatical knowledge, which can be developed from the teacher's manipulating and imitating models. The presence of writing a person can also convey an idea or information indirectly. According to Ningrum et al. (2013:2), writing is complex to learn and teach because it needs many skills. Widiati and Cahyono (2006:139) say writing is one of the four language skills that support other language skills.

Sarwanti (2013:80) stated that writing is the manner of the writer in telling and delivering the readers about something or someone, the way of describing the various emotions, expressions or writers' ways of visualizing imagination, emotions, and feeling through graphic symbols and punctuation. Meanwhile, Marz and Muhamad (2013:683) state that writing is one of the basic English skills students should master.

Types of Writing

Writing is a group of sentences that works together to develop the main idea differently depending on its purpose. There are three main types of writing in English: a) Narrative writing tells a story. The most important feature of narrative writing is that it tells a story. b) Descriptive paragraph writing is used to describe what something looks like. Each gives the

reader a clear mental picture of what is being described. c) Expository paragraph aims to explain something to the reader in many ways (Boardman and Frydenberg, 2008).

Mind Mapping Technique

Mind mapping is a diagram that organizes ideas and represents words, tasks, or links that arrange a central keyword by branches and typically contain words, colors, short phrases, and pictures (Buzan, 2006). In addition, Dawson et al. (2005) state that mind mapping is a type of pre writing technique as the first stage of the writing process to discover and explore writing to get ideas.

Think-Talk-Write Technique

Think-Talk-Write technique can help students construct their own knowledge. Think-Talk-Write (TTW) is the first technique introduced by Huinker and Laughlin. In their book, Huinker and Laughlin (1996) state that thinking and talking are important steps in bringing meaning into the students' writing.The think-Talk-Write technique builds in time for thought and reflection and for the organization of ideas and testing those ideas before students are expected to write. In addition, Huda (2013) stated Think-Talk-Write is a technique that facilitates verbal exercise and writes the language fluently. This technique is used to improve the students' exercise through presented and discussed the material. Then, convey the result in written form.Think-Talk-Write technique can help students to improve the students' ability in writing through three steps: Think, Talk and Write.

METHOD

Research Design

The type of experimental design used was a quasi-experimental design. It was because of the research conducted by the instructors or teachers who wanted to find out the result of using the techniques to teach writing skills. Therefore, the researcher used experimental research to investigate the students' writing after implementing Mind Mapping and Think-Talk-Write techniques.

Research Instrument

The instrument used by the researchers to obtain the data is a writing test. Written test is used to know how far the students' competence in writing before and after applying Mind Mapping and Think-Talk-Write techniques. Heaton (1988) stated a test might help locate the precise areas of difficulty encountered by the class or the individual student. The tests consisted of pre-test and post-test. The students were given the pre-test before the treatment.

The purpose of the pre-test was to determine the extent to which the students' skill in writing before using Mind Mapping and Think-Talk-Write Technique.

Data Collecting Procedure

The treatments were conducted using the Google Meet application due to the online learning system in this pandemic era. Google Meet is a cloud-based service that offers meetings and webinars and provides content-sharing and video conferencing capabilities. These treatments were carried out from March 27th, 2021, until April 3rd, 2021. The researcher conducted the treatment and collected the data from the sample.

FINDING AND DISCUSSION

Findings

Data Descriptions

This study aims to know whether the implementation of Mind Mapping Technique and Think-Talk-Write effectively taught writing descriptive text to the tenth-grade students at Senior High School 3 Pinrang in the academic year 2021/2022. This research was conducted on the tenth-grade students at Senior High School 3 Pinrang. The researchers used two classes as the sample. They were X MIPA 2 as an experimental group taught by using Mapping Technique and X MIPA 3 as a control group taught by using Think-Talk-Write technique. The researcher gave a pre-test to both the experiment and control group to know that both classes were homogeneous. After that, the researcher gave the treatment and then the post-test. The post-test result of both groups is compared using the T-test formula. The data description of both groups can be seen as follow:

Data on the Students Taught by Mind Mapping technique (Experimental Class)

a. *Pre-test and Post-Test of Experiment Class*

Data on the students of the pre-test experiment showed that the total score was 2414. The mean score was 63.52, the standard deviation was 4.09, the mode was 65.7, and the median was 64.89.

Table 1. Pre-test Score of Students in Experiment Class

No	Name	Xi
1	AA	78
2	AAM	76
3	FAY	74
4	IS	74
5	MIK	68
6	MAP	66
7	NR	81
8	NSA	71
9	NF	76
10	PA	70

No	Name	Xi
11	PN	70
12	RA	68
13	RZ	77
14	SM	67
15	ST	77
16	SBA	75
17	SS	71
18	TA	69
19	UA	81
20	ZKN	67
$\sum$		1456
	Average	72.8
	Median	72.5
	Modus	76

Table 2. Frequency Distribution of Pre-Test in Experiment Class

Class Limits	Frequency	Percentage	Midpoint
64-66	1	5%	65
67-69	5	25%	68
70-72	4	20%	71
73-75	3	15%	72
76-78	5	25%	77
79-81	2	10%	80

The data on the students of the post-test experiment showed that the total score was 2895. The mean was 76.18, the standard deviation was 4.54, the mode was 78.3, and the median was 77.7.

Table 3. Post-test Score of Students in Experiment Class

No	Name	Xi
1	AA	85
2	AAM	82
3	FAY	79
4	IS	79
5	MIK	73
6	MAP	71
7	NR	89
8	NSA	76
9	NF	82
10	PA	74
11	PN	75
12	RA	73
13	RZ	81
14	SM	72
15	ST	85
16	SBA	81
17	SS	75
18	TA	73
19	UA	88
20	ZKN	73
$\sum$		1556
	Average	78.30
	Median	77.5
	Modus	73

Table 4. Frequency Distribution of Post-test in Experiment Class

Class Limits	Frequency	Percentage	Midpoint
70-73	6	30%	71.5
74-77	4	20%	75.5
78-81	4	20%	79.5
82-85	4	20%	83.5
86-89	2	10%	87.5

b. *Pre-Test and Post-Test of Control Class*

Descriptive analysis of the pre-test control class data showed that the total score was 2414. The mean was 63.52, the mode was 65.7, and the median was 73.5.

Table 5. Pre-test Score of Students in Control Class

No	Name	Xi
1	AMA	67
2	AA	66
3	AD	65
4	DS	76
5	ES	76
6	HK	75
7	JMT	78
8	KRN	73
9	MA	66
10	MY	68
11	MQA	76
12	MSD	78
13	NAA	74
14	NAN	77
15	NWT	69
16	SM	71
17	SAA	74
18	SA	78
19	UR	66
20	WA	73
$\sum$		1446
	Average	73.3
	Median	73.5
	Modus	66

Table 6. Frequency Distribution of Pre-Test in Control Class

Class Limits	Frequency	Percentage	Midpoint
64-66	4	20%	65
67-69	3	15%	68
70-72	1	5%	71
73-75	5	25%	72
76-78	7	35%	77

Descriptive analysis of the post-test control class data showed that the total score was 2730. The mean was 71.84, the standard deviation was 5.54, the mode was 73.3, and the median was 72.7.

Table 7. Post-Test Score of Students in Control Class

No	Name	Xi
1	AMA	70

2	AA	71
3	AD	69
4	DS	81
5	ES	78
6	HK	82
7	JMT	80
8	KRN	77
9	MA	69
10	MY	73
11	MQA	80
12	MSD	84
13	NAA	80
14	NAN	82
15	NWT	73
16	SM	73
17	SAA	80
18	SA	81
19	UR	70
20	WA	76
$\sum$		1529
Average		76.45
Median		77.5
Modus		80

Table 8. Frequency Distribution of Post-Test in Control Class

Class Limits	Frequency	Percentage	Midpoint
67-69	2	10%	68
70-72	3	15%	71
73-75	3	15%	74
76-78	3	15%	77
79-81	6	30%	80
82-84	3	15%	83

The data obtained from the experiment and control group were analyzed to reveal the different scores between the experiment and control group. Before analyzing the data using a t-test after testing, the normality and the homogeneity test must be done. The normality test revealed that the samples were in a normal distribution. The homogeneity test was to reveal that both samples of the experiment group and control group are homogeneous.

c. Normality Test

A normality test was used to test whether the sample from the population had a normal distribution. The sample were called in normal distribution "If Lo (Lobtained) was lower than Lt (Ltable) with α = 0.05, so the data was normal." In this research, the researcher used Lilliefors for the normality test.

Table 9. The Normality Result Post-Test in the Experiment and Control Class

No	Class	Test	L_o	L_t	Criteria
1	Experiment Class	Post-test	0.0457	0.1920	Normal
2	Control Class	Post-test	0.1615		Normal

Based on the normality test data of post-test in the experiment class, the researcher obtained that L_o is 0.0457 while L_t is 0.1920. It means L_o is lower than L_t; the data post-test was a normal distribution. Meanwhile, in the data of normality test of post-test control class, the researcher obtained that L_o is 0.1651 while L_t 0.1920. It means L_o lower than L_t. The data post-test was normal distribution.

d. *Homogeneity Test*

A homogeneity test is used to determine whether the data are homogeneous. The result of the F_{test} is compared with F_{table} with the level of significance $\alpha = 0.05$. The data homogeneity test was completed from the pre-test in both the experiment and control classes. The data showed as follows:

Table 10. The Homogeneity Result of the Pre-Test

Group	N	Variance	F_{test}	F_{table}	Criteria
Experimental	20	22.16	1.03	6.01	Homogeneous
Control	20	21.37			Homogeneous

From the analysis above, the value of F_{test} was 1.03. Then this value was compared with F_{table}. The significance level is 5% ($\alpha = 0.05$) the value of F_{table} was 6.01. Because the value of F_{test} (1.03) < F_{table} (6.01), it means the data was homogeneous.

Table 11. The Homogeneity Result of the Post-Test

Group	N	Variance	F_{test}	F_{table}	Criteria
Experimental	20	31.16	1.25	6.01	Homogeneous
Control	20	24.89			Homogeneous

From the analysis above, the value of F_{test} was 1.25. Then this value was compared with F_{table}. The significance level is 5% ($\alpha = 0.05$) the value of F_{table} was 6.01. Because the value of F_{test} (1.25) < F_{table} (6.01), it means the data was homogeneous.

e. *Hypothesis Test*

Hypothesis testing is the next step to get a conclusion of the analysis. The researcher used a t-test for the hypothesis test. In this research, the null hypothesis (Ho) means there is no significant difference between the students' writing achievement taught by using Mind Mapping and using Think-Talk-Write in the tenth grade of Senior High School 3 Pinrang in the academic year 2021/2022. Meanwhile, Ha means there is a significant difference between the students' writing descriptive achievement taught by using Mind Mapping and using Think-Talk-Write at the tenth-grade students of Senior High School 3 Pinrang in the academic year 2021/2022. Alternative hypothesis (Ha) is accepted if $t_{observed} > t_{table}$, with a degree of freedom (df) (n1+n2 = 20+20-2= 38) and the level of significance α (0.05), it

means that null hypothesis (Ho) is rejected. Therefore, the alternative hypothesis (Ha) is rejected if t_observed is lower than t_table and the null hypothesis (Ho) is accepted.

Table 12. The Result of the Computation T-Test

C	N	Average	Variance	$T_{observed}$	T_{table}	Criteria
Experiment	20	78.30	31.16	4.6	2.042	Ha accepted/Ho
Control	20	76.45	24.89			rejected

Based on the calculation above, it can be obtained that the average post-test score of students in the experiment class is 78.30, while the post-test score of students in the control class is 76.45. It means that there is a significant difference between the students who are taught by using Mind Mapping and students who are taught by using Think-Talk-Write. The result of the t-test provides that t_observed is 4.6 and t_table is 2.042 with a degree of freedom (df= 20+20-2=38), and the level significance α 0.05. Because t_observed (4.6) > t_table (2.042), so the alternative hypothesis (Ha) is accepted while the null hypothesis (Ho) is rejected. It can be concluded that there is a significant difference between the students' writing achievement taught by using Mind Mapping and using Think-Talk-Write at the tenth-grade students of Senior High Scholl 3 Pinrang in the academic year 2021/2022.

Discussion

Mind Mapping and Think-Talk-Write Strategies were effective strategies to solve students' problems in getting an idea for their writing. Mind Mapping is used to generate, visualize, structure and classify ideas and to aid in study, problem-solving, and hand-writing. In this study, the findings show that both strategies improve students' descriptive writing in the post-test. This finding is in line with Silalahi (2016), who found that mind mapping is effective for helping a teacher to teach because it is not difficult to apply. In addition, in her research, Khairani (2020) proved that Think-Talk-Write Strategy effectively improves students' writing skills because this strategy can motivate the student to be more active and share their ideas with others.

Mind mapping is the easiest way to develop information in a human mind and take information out of the brain. It is a creative and effective way that map our ideas (Buzan, 2002). Maps are easier to follow than the long tardy note-taking or listing techniques where ideas are kept in a top-down sequence, and it becomes difficult to connect the last idea to the first in the list. The result of this research indicated that the Mind Mapping technique more improved the students' descriptive writing compared to Think-Talk-Write. This finding, supported by Pradasari and Pratiwi (2018) in their research state that the implementation of

mind mapping technique during the writing procedure text not only improved students' writing performance in terms of content, organization, and language use but also brought students positive attitude in the learning process.

The use of Think-Talk-Write Strategy in teaching descriptive writing positively influenced the students' writing skills. This strategy allows students to gain ideas and information needed to write. When given a topic, they would develop it by generating ideas in their minds. When the students felt they could not develop their ideas, the teacher brought some questions related to the topic given. Supandi et al. (2018) stated that Think-Talk-Write Strategy had been applied in Mathematical representation. The result shows that this strategy has improved the students' writing ability. The present research also has proved that this strategy could improve the students' writing ability in the descriptive text of Senior High School 3 Pinrang in the academic year 2021/2022. In addition, Brown (2000) argues that teaching guides and facilitates learning, enables the learner to learn, and sets the condition for learning. The listing Strategy has done its goals, but Think-Talk-Write (TTW) Strategy focused on setting a supportive and positive condition for learning that makes the students work and think about their task. Furthermore, teaching writing through Think-Talk-Write (TTW) strategy has encouraged the students to do several activities as the main point to achieve better writing skills.

CONCLUSION

The conclusion of this research is as follows: 1) There was an improvement in students' writing descriptive text using Mind Mapping technique and Think-Talk-Write at the tenth-grade students of Senior High School 3 Pinrang in the academic year 2021/2022. 2) The Mind Mapping technique improved students' writing of descriptive text more compared to Think-Talk-Write technique. Therefore, it is recommend to use mind mapping in teaching writing.

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