

The Effectiveness Of Diagrammatic Flowchart To Enhance Student's Writing Skill On Procedure Text (A Quasi - Experimental Research in Ninth Grade of SMPN 19 Kota Serang)

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ABSTRAK

Penelitian ini bertujuan untuk menyelidiki efek penggunaan Diagrammatic Flowchart dalam meningkatkan keterampilan menulis siswa pada teks prosedur. Penelitian ini memiliki tiga pertanyaan penelitian, yaitu: 1) Bagaimana keterampilan menulis siswa pada teks prosedur sebelum perlakuan? 2) Bagaimana penerapan Diagrammatic Flowchart? 3) Seberapa efektif Diagrammatic Flowchart dalam meningkatkan keterampilan menulis siswa pada teks prosedur. Untuk memenuhi tujuan penelitian ini, peneliti mengambil 60 siswa kelas sembilan sebagai responden. Kemudian mereka dibagi menjadi dua kelompok, eksperimen dan kontrol. Dalam proses perlakuan, kelompok eksperimen menerima Diagrammatic Flowchart sebagai media pembelajaran, sementara kelompok kontrol menerima pengajaran konvensional. Setelah melakukan uji-t, peneliti membandingkan t_t dengan t_0 pada tingkat signifikansi 5% yang sebesar 1,67. Oleh karena itu, hasil uji-t menunjukkan bahwa $t_0 < t_t$ atau $1,65 < 1,67$.

ABSTRACT

This research aim to investigate the effect of using Diagrammatic flowchart to enhance students' writing skill on procedure text. This study has three research question, they are : 1) How are the students writing skill on procedure text before treatment? 2) How the implementation of Diagrammatic flowchart 3) How is the effectiveness of Diagrammatic Flowchart to enhance students' writing skill on procedure text. The research design of this study consist of pre-test, treatment and post-test where IX A class acts as experimental class and IX C class acts as control class. To fulfill the purpose of this research the researcher took 60 students in ninth grade as respondents. Then they were divided into two groups, experimental and control. In the process of treatment, the experimental group received Diagrammatic flowchart as learning media, while the control group receive the conventional teaching. After doing t-test, the researcher compared t_t with t_0 on degree of significance 5% that was 1.67 Therefore, the result of t-test showed that $t_0 < t_t$ or $1.65 < 1.67$.

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1. INTRODUCTION

This study addresses the challenge of improving writing skills among English Foreign Learners (EFL), focusing on ninth-grade students at SMPN 19 Kota Serang. Writing is a critical language competency that requires mastery for effective communication, but students often struggle due to factors like low motivation and insufficient vocabulary and grammar skills. According to the Department of National Education in Indonesia, the goal for Junior High School English is to enhance students' abilities in various text forms, including procedure texts. The study's preliminary phase involved interviews with the English teacher, revealing that students are generally passive, lack motivation, and find writing particularly difficult. Many students struggle with idea development, vocabulary, and grammar, impacting their ability to meet the Minimum Completeness Criteria (KKM) for writing procedure texts.

To address these issues, the study proposes using a Diagrammatic Flowchart as an effective instructional tool. This graphic organizer helps students structure their ideas and write procedure texts systematically, aligning with the text's generic structure and language features. Previous research, including Rita's study, supports the effectiveness of the Diagrammatic Flowchart in significantly improving writing skills, showing an 18% increase in student performance.

The researcher aims to explore the effectiveness of the Diagrammatic Flowchart in enhancing writing skills through a quasi-experimental study, titled "The Effectiveness of Diagrammatic Flowchart to Enhance Students' Writing Skill on Procedure Text." This study will evaluate how this method can improve students' writing proficiency in procedure texts at SMPN 19 Kota Serang. Due to the researcher has many problems in conducting this study, so this study only concerns to investigate the effectiveness of Diagrammatic Flowchart to enhance student's Writing skill on Procedure text.

2. RESEARCH METHOD

This study employed a quasi-experimental method According to Sugiyono (2013) "a quasi experimental is a research method that used to find influence certain treatments against others in controlled conditions". This quasi-experimental research involves two the sample group is the group experimental and control groups (Sugiyono, 2013). Group experiment is a group that get treatment that is group students who take lessons with using the experimental method, while the control group is group that did not get treatment namely the group of students who follow learning without using methods experiment. The researcher took this design because the main objective of this study is to investigate the effectiveness of Diagrammatic Flowchart to enhance students' writing skill on procedure text. The main reason of the researcher used the quasi-experimental method because it enables the the researcher to compare between experimental group and control group.

According Fraenkel and Wallen (McGraw Hill, 2007) to the research design of quasi experimental design can be described as follows:

O_1X	O_2
O_3	O_4

Where:

O_1 : Experimental group before giving treatment

O_3 : Control group without treatment

- X : Treatments
- O₂ : Experimental group after receiving treatment
- O₄ : Control group without receiving treatment

In this study, two classes were involved simultaneously, they were IXA and IXC. Because that classes permitted by the school and the number of students were also sufficient for doing experimental study. This study was conducted in SMPN 19 Kota Serang for two months with details as follows: one month for doing a preliminary study and giving pre-test (November 14 to December 12, 2021) and one month for (March 21 to April 18, 2022) giving treatment, doing post-test and collecting data. The population can be defined as set of instances that meet specific criteria, to whom the researcher plans to apply the study's findings (Andrew, dkk., 2011). The population of this study were the ninth grade students of SMPN 19 Kota Serang which consist of 120 students. The researcher took two classes as simple research from the ninth grade students at SMPN 19 Serang. The researcher took IX A as experimental group with 30 students and IX C as control group with 30 student.

3. RESULT AND DISCUSSION

The researcher initiated this study with a preliminary phase involving interviews with the English teacher and administering pre-tests to two groups, IX A and IX C, over a one-week period. Initial findings from these interviews are discussed in Chapter I, with additional details provided in this chapter to complement the pre-test and post-test data. The pre-test data will be presented to demonstrate students' writing skills prior to the intervention. To ensure clarity and comprehensibility, the research findings will be organized according to the research questions:

1) How is students' writing skills on procedure text at the ninth grade students of SMPN 19 Kota Serang before treatment?

After giving pre-test to both groups, then the researcher along with the English teacher checked student worksheet. The English teacher gave a pre-test score based on writing assessment rubric. Based on recapitulation pre-test score from experimental class the lowest score was 48 and the high score was 76. Meanwhile, the mean score was 63.06. Based on recapitulation pre test form control class the minimum score in the control group was 54, the highest score was 77 and the mean score was 66.86. Having distributed pre-test to both groups, checked student work sheet and given score. The researcher can draw an inference that most students' scores have not reached the minimum scores, that is 70 based on Minimum Completeness Criteria.

Based on document analysis from the student worksheet and interview with the English teacher. The students' problems in writing were caused by several factors they are : 1. Content 2. Organization. 3. Grammar 4. Vocabulary and the last is mechanics.

2) How is the implementation of Diagrammatic Flowchart to enhance students' writing skill on procedure text?

In this study, after administering pre-tests to both groups, the researcher implemented a treatment for the experimental group using Diagrammatic Flowcharts. During this phase, the researcher, who also acted as the English teacher, collaborated with the English teacher to develop and refine the lesson plan, incorporating suggestions for teaching methods and student worksheets. The treatment phase began with the researcher greeting students, taking attendance, and outlining the learning objectives. The researcher aimed to motivate students to improve their writing skills, particularly in composing procedure texts. Guidance from the English teacher emphasized adhering to the scientific approach required by the 2013 curriculum.

The learning process followed a structured approach:

- a. Observing: Students watched a video on procedure texts to understand its social functions, generic structure, language features, and examples. Observations indicated that students

in the experimental group were engaged and attentive during this phase.

- b. Asking Questions: Students were encouraged to ask questions about unclear aspects of the video. This phase aimed to foster creativity, curiosity, and critical thinking. Many students took this opportunity to ask questions related to procedure texts.
- c. Collecting Information/Experiments**: The teacher explained the procedure text material and introduced the Diagrammatic Flowchart, including its symbols and functions. Students learned to use the flowchart to write procedure texts and were involved in various activities like experiments, reading supplementary sources, and observing events. This phase aimed to develop students' diligence, communication skills, and lifelong learning habits.
- d. Associating/Processing Information**: Students processed the collected information, integrating it into their procedure texts. This phase focused on developing students' analytical skills and their ability to draw conclusions from diverse sources. Observations showed that many students effectively processed and incorporated the information into their writing.
- e. Communicating**: Students presented their written procedure texts orally or in writing. This final phase aimed to enhance their ability to express ideas clearly, think systematically, and use correct language. Most students demonstrated increased confidence in presenting their work, while others engaged in peer review and feedback.

Overall, the Diagrammatic Flowchart approach facilitated a comprehensive learning experience, enabling students to improve their writing skills in a structured and engaging manner.

3) How is the effectiveness of Diagrammatic Flowchart to enhance students' writing skills on procedure text

Having given treatment to the experimental group for one month. Then, the researcher design post-test instrument. The post-test instrument has been consulted to the advisors and the English teacher before distributed to both groups. The results of post-test will be tested firstly its data distribution by using normality test then if the data have normal distribution, it will be used for t-test.

a. Normality test

Before testing the effectiveness of diagrammatic flowchart to enhance student's writing skill on procedure text by using t-test formula. The post-test data from both groups will be tested firstly its data distribution by using Lilliefors formula.

Table 1.1 The Result of Post-Test from Experimental Group (X1)

No	Participant	Organization	Content	Grammar	Mechanics	Vocabulary	Total
1	Student 1	16	24	15	4	12	71
2	Student 2	16	18	15	3	16	68
3	Student 3	16	18	20	4	12	70
4	Student 4	16	18	20	4	12	70
5	Student 5	16	24	20	4	16	80
6	Student 6	16	18	15	5	16	70
7	Student 7	16	24	20	4	12	76
8	Student 8	16	24	20	4	12	76
9	Student 9	16	24	15	4	12	71
10	Student 10	20	24	20	4	16	84
11	Student 11	16	18	20	4	12	70
12	Student 12	16	18	20	4	12	70

13	Student 13	16	18	15	3	16	68
14	Student 14	16	24	20	3	12	75
15	Student 15	16	18	15	5	16	70
16	Student 16	16	24	20	3	12	75
17	Student 17	16	18	20	4	12	70
18	Student 18	16	24	20	4	16	80
19	Student 19	16	24	20	4	12	76
20	Student 20	16	18	20	4	12	70
21	Student 21	12	24	20	4	12	72
22	Student 22	12	24	20	4	12	72
23	Student 23	16	18	20	4	12	70
24	Student 24	12	24	20	3	16	75
25	Student 25	16	24	20	4	12	76
26	Student 26	16	24	15	4	12	71
27	Student 27	12	24	20	3	16	75
28	Student 28	12	24	20	4	12	72
29	Student 29	16	24	20	4	12	76
30	Student 30	16	24	20	4	16	80
						Σ	2199
						$\bar{X}$	73.3

After calculating the post-test score from the experimental group, then the researcher created assistant table to calculate mean score and standard deviation in the table 4.4 as follows:

The Table 1.2 Assistant Table to Find out Standard Deviation of Experimental Group

respondent	X	F	FX	X	X ²	FX ²
1	68	2	136	-5.3	28.09	56.18
2	70	9	630	-3.3	10.89	98.01
3	71	3	213	-2.3	5.29	15.87
4	72	3	216	-1.3	1.69	5.07
5	75	4	300	1.7	2.89	11.56
6	76	5	380	2.7	7.29	36.45
7	80	3	240	6.7	44.89	134.67
8	84	1	84	10.7	114.49	114.49
	Σ	30	2199			472.3
	$\bar{X}$		73.3			
	Σ		3.96			

Moreover, the researcher counted the mean score of experimental group (X1) by using formula as follows:

$$\bar{X} = \frac{\sum FX}{\sum F}$$

$$\bar{X} = \frac{2199}{30} = 73.3$$

In addition, counting standard deviation (σ) of experimental group (X1) by using formula as follows:

$$\sigma = \sqrt{\frac{\sum FX^2}{\sum F}}$$

$$\sigma = \sqrt{\frac{472.3}{30}}$$

$$\sigma = \sqrt{15.74} = 3.96$$

Furthermore, the previous data were used to test its normality by using Lilliefors formula as follows:

Table 1.3 Normality Test of Experimental Group

No	X1	Z	F(Z)	S(Z)	(F(Z) – S(Z))
1	68	-1.33	0.0918	0.03	0.0618
2	68	-1.33	0.0918	0.06	0.0318
3	70	-0.83	0.2033	0.1	0.1033
4	70	-0.83	0.2033	0.13	0.0733
5	70	-0.83	0.2033	0.16	0.0433
6	70	-0.83	0.2033	0.2	0.0033
7	70	-0.83	0.2033	0.23	0.0267
8	70	-0.83	0.2033	0.26	0.0567
9	70	-0.83	0.2033	0.3	0.0967
10	70	-0.83	0.2033	0.33	0.1267
11	70	-0.83	0.2033	0.36	0.1567
12	71	-0.58	0.281	0.4	0.119
13	71	-0.58	0.281	0.43	0.149
14	71	-0.58	0.281	0.46	0.179
15	72	-0.32	0.3745	0.5	0.1255
16	72	-0.32	0.3745	0.53	0.1555
17	72	-0.32	0.3745	0.56	0.1855
18	75	0.42	0.3372	0.6	0.2628
19	75	0.42	0.3372	0.63	0.3372
20	75	0.42	0.3372	0.66	0.3228
21	75	0.42	0.3372	0.7	0.3628
22	76	0.68	0.2482	0.73	0.4818
23	76	0.68	0.2482	0.76	0.5118
24	76	0.68	0.2482	0.8	0.5518
25	76	0.68	0.2482	0.83	0.5818
26	76	0.68	0.2482	0.86	0.6118
27	80	1.69	0.0455	0.9	0.8545
28	80	1.69	0.0455	0.93	0.8845
29	80	1.69	0.0455	0.96	0.9145
30	84	2.7	0.0035	1	0.9965

Then to determine Z score, the researcher used the following formula as follows:

$$Z = \frac{X1 - \bar{X}}{SD}$$

$$Z = \frac{68 - 73.3}{3.96} = -1.33$$

From computation above, it can be concluded that mean score of experimental group was 73.3, standard deviation was 3.96, L count was 0.1555 and L table was 0.161 (see Appendix: Critical Value L for Liliefors Test) . Moreover, based on the previous data, the researcher compare the value of L count and L table. The result shows that the L_0 score (0.1555) < L_t (0.161). It means that the data of experimental group has normal distribution and can be employed for research data.

In addition, In the following lines will show the calculation of normality test for control group as follows:

Table 1.5 The Result of Post-Test from Control Group (X2)

No	Participant	Organization	Content	Grammar	Mechanics	Vocabulary	Total
1	Student 1	16	24	15	4	12	71
2	Student 2	16	18	15	3	16	68
3	Student 3	12	24	15	4	12	67
4	Student 4	16	18	15	3	12	64
5	Student 5	12	18	15	3	12	60
6	Student 6	16	18	15	4	16	69
7	Student 7	16	24	20	4	12	76
8	Student 8	16	24	20	4	12	76
9	Student 9	16	24	15	4	12	71
10	Student 10	16	24	20	4	16	80
11	Student 11	12	12	20	4	12	60
12	Student 12	16	24	15	4	12	71
13	Student 13	16	18	15	3	16	68
14	Student 14	16	18	20	4	12	70
15	Student 15	12	18	15	3	12	60
16	Student 16	12	24	15	4	12	67
17	Student 17	16	18	20	4	12	70
18	Student 18	12	18	15	3	12	60
19	Student 19	16	12	20	3	12	63
20	Student 20	16	24	20	4	12	76
21	Student 21	12	12	15	3	12	54
22	Student 22	12	24	15	4	12	67
23	Student 23	16	24	15	4	12	71
24	Student 24	12	24	20	3	16	75
25	Student 25	16	12	20	3	12	63s
26	Student 26	16	18	15	3	16	68
27	Student 27	12	24	20	3	16	75
28	Student 28	12	24	15	4	12	67
29	Student 29	16	24	20	4	12	76
30	Student 30	16	24	20	4	16	80
						Σ	2100
						$\bar{X}$	70

Similar to experimental group, having counted the post-test score then the researcher created assistant table to calculate mean score and standard deviation in the table 4.7 as follows:

Table 1.6 Assistant Table to Find out Standard Deviation of Control Group

respondent	X	F	FX	X	X ²	FX ²
1	54	1	54	-16	256	256
2	60	4	240	-10	100	400

3	63	2	126	-7	49	98
4	64	1	64	-6	36	36
5	67	4	268	-3	9	36
6	68	3	204	-2	4	12
7	69	1	69	-1	1	1
8	70	2	140	0	0	0
9	71	4	284	1	1	4
10	75	2	150	5	25	50
11	76	4	304	6	36	144
12	80	2	160	10	100	200
	Σ	30	2100			1237
	$\bar{X}$	70				
	Σ	6.42				

Moreover, the researcher counted the mean score of control group (X2) by using formula as follows:

$$\bar{X} = \frac{\sum FX}{\sum F}$$

$$\bar{X} = \frac{2100}{30} = 70$$

In addition, counting standard deviation (σ) of control group (X2) by using formula as follows:

$$\sigma = \sqrt{\frac{\sum FX^2}{\sum F}}$$

$$\sigma = \sqrt{\frac{1237}{30}}$$

$$\sigma = \sqrt{41.23} = 6.42$$

Furthermore, the previous data were used to test its normality by using Lilliefors formula as follows:

Table 1.7 Normality Test of Control Group

No	X1	Z	F(Z)	S(Z)	(F(Z) – S(Z))
1	54	-2.49	0.0064	0.03	0.0236
2	60	-0.01	0.0004	0.06	0.0596
3	60	-0.01	0.0004	0.1	0.0996
4	60	-0.01	0.0004	0.13	0.1296
5	60	-0.01	0.0004	0.16	0.1596
6	63	-1.09	0.1379	0.2	0.0621
7	63	-1.09	0.1379	0.23	0.0921
8	64	-0.93	0.1762	0.26	0.0838
9	67	-0.46	0.3228	0.3	0.0228
10	67	-0.46	0.3228	0.33	0.0072
11	67	-0.46	0.3228	0.36	0.0372
12	67	-0.46	0.3228	0.4	0.0772
13	68	-0.31	0.3783	0.43	0.0517
14	68	-0.31	0.3783	0.46	0.0817
15	68	-0.31	0.3783	0.5	0.1217
16	69	-0.15	0.4404	0.53	0.0896
17	70	0	0.5	0.56	0.06

18	70	0	0.5	0.6	0.1
19	71	0.15	0.4404	0.63	0.1896
20	71	0.15	0.4404	0.66	0.2196
21	71	0.15	0.4404	0.7	0.2596
22	71	0.15	0.4404	0.73	0.2896
23	75	0.77	0.2206	0.76	0.5394
24	75	0.77	0.2206	0.8	0.5794
25	76	0.93	0.1762	0.83	0.6538
26	76	0.93	0.1762	0.86	0.6838
27	76	0.93	0.1762	0.9	0.7238
28	76	0.93	0.1762	0.93	0.7538
29	80	1.55	0.0606	0.96	0.8994
30	80	1.55	0.0606	1	0.9394

Then to determine Z score, the researcher used the following formula as follows:

$$Z = \frac{X_1 - \bar{X}}{SD}$$

$$Z = \frac{54 - 70}{6.42} = -2.49$$

From computation above, it can be concluded that mean score of experimental group was 70, standard deviation was 6.42, L count was 0.1 and L table was 0.161 (see Appendix: Critical Value L for Liliefors Test) . Moreover, based on the previous data, the researcher compare the value of L count and L table. The result shows that the L_0 score (0.1) < L_t (0.161). It means that the data of control group has normal distribution and can be employed for research data.

b. T test

After testing normality and getting the data from post-test score from both groups, then the researcher analyzed the data by using t-test formula as follows:

Table 4.9 The Calculation Scores of Experiment and Control Group

No	X ₁	X ₂	x ₁	x ₂	X ₁ ²	X ₂ ²
1	71	71	-2.3	1	5,29	1
2	68	68	-5.3	-2	28,09	4
3	70	67	-3.3	-7	10,89	49
4	70	64	-3.3	-6	10,89	36
5	80	60	6.7	-10	44,89	100
6	70	69	-3.3	-1	10,89	1
7	76	76	2.7	6	7,29	36
8	76	76	2.7	6	7,29	36
9	71	71	-2.3	1	5,29	1
10	84	80	10.7	10	114,49	100
11	70	60	-3.3	-10	10,89	100
12	70	71	-3.3	1	10,89	1
13	68	68	-5.3	-2	28,09	4
14	75	70	1.7	0	2,89	0
15	70	60	-3.3	-10	10,89	100
16	75	67	1.7	-7	2,89	49
17	70	70	-3.3	0	10,89	0
18	80	60	6.7	-10	44,89	100

19	76	63	2.7	-7	7,29	49
20	70	76	-3.3	6	10,89	36
21	72	54	-1.3	-16	1.69	256
22	72	67	-1.3	-7	1.69	49
23	70	71	-3.3	1	10,89	1
24	75	75	1.7	5	2,89	25
25	76	63	2.7	-7	7,29	49
26	71	68	-2.3	-2	5,29	4
27	75	75	1.7	5	2,89	25
28	72	67	-1.3	-7	1.69	49
29	76	76	2.7	6	7,29	36
30	80	80	6.7	10	44,89	100
	$\Sigma X_1 = 2199$	$\Sigma X_2 = 2100$	$\Sigma x_1 = 0$	$\Sigma x_2 = 0$	$\Sigma X_1^2 = 467.23$	$\Sigma X_2^2 = 1397$

From the previous table, the researcher obtained data as follows $\Sigma X_1 = 2199$, $\Sigma X_2 = 2100$, $\Sigma X_1^2 = 467.23$, and $\Sigma X_2^2 = 1397$. Moreover, the researcher compared the result of post-test from both groups by using t-test formula as follows:

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\Sigma X_1^2 + \Sigma X_2^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \cdot N_2} \right\}}}$$

$$t_0 = \frac{73.3 - 70}{\sqrt{\left\{ \frac{467.23 + 1397}{30 + 30 - 2} \right\} \left\{ \frac{30 + 30}{30 \cdot 30} \right\}}}$$

$$t_0 = \frac{3.3}{\sqrt{\{66.57\} \{0.06\}}}$$

$$t_0 = \frac{3.3}{\sqrt{3.99}}$$

$$t_0 = \frac{3.3}{1.99} = 1.65$$

After doing t-test, the researcher compared t_i with t_0 on degree of significance 5% that was 1.67. Therefore, the result of t-test showed that $t_0 < t_i$ or $1.65 < 1.67$.

In brief, t-test showed that H_a or alternative hypothesis was rejected. Meanwhile, H_0 or null hypothesis was accepted.

In other words, It can be drawn a conclusion that there is no a significant effect of using diagrammatic flowchart to enhance students' writing skill on procedure text at the ninth grade of SMP Negeri 19 Kota Serang.

As a matter of fact, based on t-test shows that there is no a significant effect of using diagrammatic flowchart to enhance students' writing skill on procedure text between experimental group and control group. Although the results of comparison between experimental group and control group did not show significant difference. However, if we compare the mean score of experimental group in the pre-test and post-test, the results shows a fairly good improvement. This is indicated by the mean score of pretest was 63.06 and the mean score of post-test was 73.3 and has exceeded the score of Minimum Completeness Criteria, which is 70.

In addition, this study also revealed that after receiving treatment, most of the students of experimental group experienced a gradual improvement in their writing skills, they were also quicker to understand the general concepts and language features of procedure text, more open to receive feedback, as well as more courageous to present their writing works.

4. CONCLUSION

Based on the findings and discussion from the previous chapter, this study can be summed up as follows:

- 1) Most students' scores have not reached the minimum scores, that is 70 based on Minimum Completeness Criteria. On one hand, in the experimental group (IX A) the lowest score was 48 and the highest score was 76. Meanwhile, the mean score was 63.06. On the other hand, the minimum score in the control group was 54, the highest score was 77 and the mean score was 66.86.
- 2) When giving treatment to the experimental group, the researcher still applies a scientific approach by utilizing instructional media, namely Diagrammatic Flowchart. The steps of giving treatment consist of (1) observing (2) asking questions (3) collecting information/experiments (4) associating/processing information and (5) communicating. Essentially, these learning steps are described in detail in the 2013 Curriculum.
- 3) Based on t-test, the researcher compared t_t with t_0 on degree of significance 5% that was 1.67. Therefore, the result of t-test showed that $t_0 < t_t$ or $1.65 < 1.67$. In brief, t-test showed that H_a or alternative hypothesis was rejected. Meanwhile, H_0 or null hypothesis was accepted. In other words, It can be drawn a conclusion that there is no a significant effect of using diagrammatic flowchart to enhance students' writing skill on procedure text at the ninth grade of SMP Negeri 19 Kota Serang.

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