

## THE USE OF FLOW CHART ON STUDENTS' WRITING AT THE GRADE 10 OF SMAS WITAMA PEKANBARU

<sup>1</sup>\*Robby Ibrahim

<sup>1</sup>SMAS Witama Pekanbaru, Riau, Indonesia

\*Corresponding author: [robbyibrahim92@gmail.com](mailto:robbyibrahim92@gmail.com)

### Abstract

The students at grade 10 of SMAS Witama Nasional Plus Pekanbaru had some problems in writing. Based on my observation they were hard to share and develop their ideas in writing. I tried to prove the problem by using Flow chart in teaching writing descriptive text. The purpose of this research is to identify whether the students who received in class instruction of flow chart method of writing had different skill in writing descriptive text than students who did not receive instruction of the method at the. This research was Quasi Experimental research. The population of this research was the grade 10 of SMAS Witama Nasional Plus Pekanbaru The numbers of population was 180 students and the sample of this research was 54 students; Experimental class was 10 IPA 1 consisting 28 students, and Control class was 10 IPS 1 consisting 26 students. After conducting this research by using Flow chart, the result of this research is the post-test score of experimental class was getting higher than pre-test score. It can be seen from the average post-test score of experimental class was 68.21, that improved from pre-test score 52.78. The average post-test on control class was 56.76 was lower than Experimental class. As the conclusion, there was different ability the students who received in class instruction of flow chart in writing descriptive text than students who did not receive instruction of flow chart.

**Keywords:** Flow chart, Writing, Descriptive Text

### 1. Introduction

Writing is one of productive skills in English that must be learned by students. Many students consider writing to be the most difficult subject to learn since a good writing not only requires the writer to communicate his/her ideas into writing but also demands him/her to be proficient in grammar, vocabulary, and mechanics. Although writing is very complex, students should be able to produce a good writing because the ability to write well-organized and concise text is very crucial to students' success in almost subject course. Syafi'i (2007:6) states that writing is a "process", not a "product". It means that a piece of writing whether it is a composition of English class, it is possible to review and revise and review and revise again.

Pertaining to curriculum of Senior high school particularly in writing skill, students are targeted to be able to write well in all aspects of writing. One of competences focuses on writing; students are demanded to understand the meaning of written text in descriptive form that relate to the environment. Firstly, the students are able to describe person or things in detail based on the topic. Second, the students are able to express their ideas in writing descriptive text. And the last, students are able to develop their ideas to become a good descriptive text.

Based on my preliminary study of SMAS Witama Nasional Plus. Most of students have trouble in studying English especially in writing descriptive text. Actually, SMAS Witama Nasional Plus has adequate

facilities in order to make the students easier in teaching and learning process. Besides that, students are taught English twice a week for two meeting hours. In fact, students still have trouble in English especially in writing descriptive text. It might be several factors. The first is students' trouble in developing ideas in written forms. The students spent a lot of time to write a text. After that students are confused to start their writing. The last is their lack of strategy in writing. Therefore, teacher needs to have appropriate technique in teaching writing, in order to help the students to express their ideas easily.

With regard to the students' writing problem, method of teaching writing descriptive text is one of the aspects that will influence the achievement of teaching writing. Using good method of teaching will help the students to be good at writing descriptive text, for example by using flow chart. Based on some researches' ideas that flow chart is one of methods that is effective to help students in improving students' skills, especially in writing descriptive text. Flow charts are also used when the key points are known but their relationship to each other is not quite clear and flow chart is going to help students brainstorm ideas and formulate strategies for better planning.

Flow chart is easy to be used in English class. At the first, teacher as a model in class gives example words that relate to topic. Then students make the chart that relates the words to support the ideas. After that, students can also use to a text well especially to a descriptive text. Certainly, it will influence in doing writing. They become accustomed to writing well.

This research is an experimental-research. Here, I want to compare two methods in teaching writing descriptive text in two classes; treatment and control class. Firstly, I want to use flow chart method in treatment class. And secondly, I want to use ordinary method in control class. Then I will see whether flow chart can effectively increase students' ability in writing or not. Therefore, related to the premise and explanation above, I am as the researcher is going to conduct an experimental-research entitled "The use of Flow Chart on Students' Writing Descriptive at the Grade 10 of SMAS Witama Nasional Plus Pekanbaru".

## 2. Research Method

The research was experimental research. An experimental-research is the traditional approach to conducting quantitative research Creswell (2005:282). In an experiment, test an idea (or practice or procedure) to determine whether it influences an outcome or dependent variable. An experiment is used to establish possible cause and effect between the independent and dependent variables. It means that the researcher attempted to control all variables that influence the outcome except for the independent variable. Then when the independent variable influenced the dependent variable, we can say the independent variable "caused" or "probably caused" the dependent variable. Since experiment was controlled, they are the best of the quantitative designs to use to establish probable cause and effect.

Even though all experiments have common characteristics, their use and applications vary depending on the type of research used. The most common research, the researcher is going to find in educational research is Quasi experiment in Between-Group Research.

In this type of experimental research, I chose Quasi Experimental (pre and post-test, post-test only) in Between-Group Research. Between-Group Research is the most frequently used designs in education are those where the researcher compares two or more groups Creswell (2005:295). And the Quasi experimental research include assignment, but no random assignment of participants to groups. The researcher assigned intact groups of the experimental and control treatments, research a pre-test to both groups, conduct experimental treatment activities with the experimental group only, and then research a post-test to assess the different between the two groups.

To collect the data, the researcher used the test as the instrumentation of this research. The test was writing test. Writing test was the instrument in quantitative research to answer the research question in this research.

### 3. Results and Discussion

#### Pre-Test

As I explained in the previous chapter, the test was writing test in descriptive text that should be done by the students in the experimental group and the control group, and the result of the pre-test can be seen in the table below:

**Table 1.** Descriptive Statistic of Pre-test Score

Value	Class	n	Test of Mastery Concept			Average
			Ideal score	Minimum Score	Maximum score	
Pre-Test	Experimental	28	100	40	62	52.78
	Control	26	100	30	66	53.61

With regard to Table 1, it shows that minimum score on the test of experimental class was 40 and control class was 30. Maximum score on experimental class in the table was 62; it was lower than control class for maximum score that got 66. Test of mastery concept on pre-test from the average showed experimental class was 52.78 and control class was 53.61.

Here I used Kolmogorov-Smirnov (KS-21) as formula to get the result of Normality test. The result of Normality test of pre-test of both classes can be seen in the following table:

**Table 2.** Normality Test of Pre-test

Class	Asymp.Sig. (2-tailed)	$\alpha$ (Significant Level)	Hypothesis	Distribution
Experiment	0.935	0.05	Accept $H_0$	Normal
Control	0.407	0.05	Accept $H_0$	Normal

From the Table 2, it shows normality test that done of pre-test on experiment class and control class that the distribution of data was normal. Experiment class in Asymp.Sig. (2-tailed) was 0.935 with significant level was 0.05, if the data value of Asymp.Sig. (2-tailed)  $0.935 > 0.05$ , it meant that the distribution of data was normal and the Control class value of Asymp.Sig. (2-tailed)  $0.407 > 0.05$ .

In analyzing the data, this homogeneity test was calculated by Levene Formula. Based on the result of pre-test both experiment class and control class got homogeneity test as follow.

**Table 3.** Homogeneity Test of Pre-test

Data	Trimmed mean	$\alpha$ (Significant Level)	Hypothesis	Distribution
Pre-test	0.701	0.05	Accept $H_0$	Homogenous

With regard to Table 3, homogeneity test of pre-test gained value of Based on trimmed mean that was 0.701 with significant level 0.05, that was why said that the pre-test on experiment class was coming from homogenous variance when based on trimmed mean  $0.701 > 0.05$ , it meant that pre-test data both the classes were from the homogenous variance. The result of t-test on pretest can be seen in the table below:

**Table 4.** T-test Result of Pre-test

Data	Asym.Sig. (2-tailed)	$\alpha$ (Significant Level)	Hypothesis	Significance
Pre-test	0.269	0.05	Accept $H_0$	Not differ significant

As the Table 4, t-test of both classes; experimental and control were not significant difference. It occurred since the value of Asym.Sig.(2-tailed) was 0.269. it meant that Asym.Sig.(2-tailed)  $0.269 >$

significant level 0.05. Here I concluded that the students' ability of experimental class and control class were equal and not differ significant.

### Post-Test

Based on the data that had been collected, experiment class and control class were getting the post-test data in the following table:

**Table 5.** Descriptive Statistic of Post-test Score

Value	Class	n	Test of Mastery Concept			
			Ideal score	Minimum Score	Maximum score	Average
Post-Test	Experimental	28	100	58	78	68.21
	Control	26	100	40	74	56.76

As the table shows, the maximum score, minimum score, and the average score of Post-Test on experiment class was getting higher than control class. The minimum score for experiment class was 58, while the control class was 40. The maximum score on the control class was 74, it was lower than score gained by experiment class 78, moreover, the average of Post-Test class on experiment class was 68.21 and the control class for the average of Post-Test was 56.7. Normality test in this research used a formula of Kolmogorov Smirnov (KS-21). The result of normality test of post-test can be seen from the following table:

**Table 6.** Normality Test of Post-test

Class	Asymp.Sig. (2-tailed)	a (Significant Level)	Hypothesis	Distribution
Experiment	0.877	0.05	Accept $H_0$	Normal
Control	0.904	0.05	Accept $H_0$	Normal

On the table, the normality test of post-test on experiment class and control class had normal distribution. Here experiment class had the column Asymp.Sig.(2-tailed) 0.877, it compared with significant level 0.05. Asymp.Sig.(2-tailed) 0.877 > 0.05, it meant that data was normal. While the control class got Asymp.Sig.(2-tailed) 0.904 with significant level 0.05. Based on result of post-test gained by both classes, the result of homogeneity test as follow:

**Table 7.** Homogeneity Test of Post-test

Data	Trimmed mean	a (Significant Level)	Hypothesis	Distribution
Post-test	0.180	0.05	Accept $H_0$	Homogenous

Pertaining to table above, the value of trimmed mean was 0.180 with level significant 0.05. Based on trimmed mean was higher than level significant 0.05. It could be said post-test data on experimental and control class were homogenous variance because trimmed mean 0.180 > 0.05. Since data was normal and homogenous, so then data could be calculated by using parametric. Here data calculated by T-test. T-test was Asym.Sig. (2-tailed) that was compared with significant level 0.05, when the data value of Asym.Sig.(2-tailed) < 0.05, so that the data is differ significant, but if the data value of Asym.Sig. (2-tailed) > 0.05. It is not significant difference. The result of t-test on post-test can be seen in the table below:

**Table 8.** T-test Result of Post-test

Data	Asym Sig. (2-tailed)	a (Significant Level)	Hypothesis	Significance
Post-test	0.000	0.05	Reject $H_0$	Differ Significant

Based on table provided above, it shows that t-test of post-test on control and experimental class were differ significant, because Asym Sig. (2-tailed)  $0.000 < 0.05$ . it could be concluded that both of classes were differ significant.

### N-Gain

N-gain was used to know the effect size the treatment that was given to experimental class. The calculation was performed based N-gain formula. Then, comparing with the criteria of achievement N-gain. From the result of N-gain average value of experimental class, it correlated with the criteria of achievement of N-gain value. The result of N-Gain can be seen as follow:

**Table 9.** N-Gain Score of Experimental Class

Test	n	N-Gain			Average N-Gain
		Score Ideal	Minimum Score	Maximum Score	
Pre-test	28	100	40	62	0.32
Post-test	28	100	58	78	

Based on table provided above, Average of N-Gain was 0.32. it meant that the significant of strategy that used in experimental class was middle because the Average of N-Gain was 0.32. In criteria of achievement N-Gain Score could be said Middle if score in  $0.3 < g < 0.7$ . and the average of N-Gain was  $0.3 < 0.32 < 0.7$ . So It was Middle.

### 4. Conclusion

Based on the purpose of this research is to identify whether the students who received in class instruction of flow chart method of writing had difference in writing descriptive text than students who did not receive instruction of the method at the grade 10 of SMAS Witama Nasional Plus Pekanbaru and the formulation: "Do the students who receive in class instruction of using flow chart method in writing have difference ability in writing descriptive text than the students who do not receive the instruction method?" it has been successfully answered that Yes, they do. The students who receive in class instruction of using flow chart method in writing had difference ability in writing descriptive text than students who did not receive the instruction method. It supported by several results:

1. There was a significant difference of the students' ability in writing descriptive text between pre-test and post-test of experimental class. It meant that, there was a significant different of the students' ability in writing descriptive text before and after the implementation of flow chart at the grade 10 of SMAS Witama Nasional Plus Pekanbaru.
2. There was a significant difference of the students' ability in writing descriptive text between experimental class that received instruction by flowchart than control class that did not receive instruction method.

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