# **CHAPTER IV**

# DISCUSSION

This chapter presents the data and data analysis as the result of the research. The data was obtained from experiment conducted in the tenth graders of SMA Ta'miriyah Surabaya, it was obtained through pre-test and post-test and the data analysis had been calculated by using T-test.

# 4.1 Presentation of the Data

This research takes two classes; they are X.4 (control group) and X.6 (experimental group). Experiment research requires the students attend every meeting; from pre-test, treatment 1, treatment 2, and post-test. The writer really appreciates to the students who were to be her research object, because from the first day until the fourth day there were no students absent.

This experimental research was conducted to find out whether is a significance difference between the students's who are taught narrative text by using Picture Series and those who are taught narrative text without Picture Series. There were two steps to obtain the data, first the researcher used pre-test to both experimental and control groups this was conducted in order to know the students' writing ability before given treatments. The last step was post-test this was conducted to both experimental and control groups in order to know if there is any significance difference in students' writing ability after given treatments.

There were some procedures to calculate the data between pre-test and post-test, the procedures were same between those groups. First procedure was finding the mean, second procedure was finding the standard deviations, third procedure was finding standard error of difference, and the last procedure was calculate t-value by using t-test formula.

The data presentation here shows the result of computation by analysis of using Microsoft office Excel 2007 because the statistic value in this research can be account enough using the functions in Microsoft Excel. It is applied here to test whether there is means difference between experimental group and control group after given the treatments and to know whether a series of picture can help the students to have better score in writing or not.

#### 4.1.1 Result of Pre-test Score

The researcher conducted the pre-test in order to know the students' writing ability before given treatments. They are asked to compose a narrative text based on the topic given. Then the researcher analyzed the data by calculating the sum and the mean of pre-test scores to both experimental and control groups.

# Table 4.1 the Pre-test scores and means of experimental and control groups

Group	N	Score	Mean
Experimental	30	1968	65.60
Control	30	1987	66.25

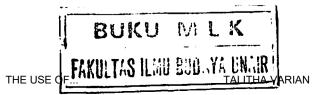
posttest, and two treatments need three weeks to be done. It was adjusted with the school schedule. The second step of technique of data collection profile was used. It contained five components scale: content, organization, vocabulary, language use, and mechanics (Jacob et al., 1980).

The next step of technique data collection was to put the scores on the tables. All the students' score were listed on the tables. As the resul, the data of students' writing scores can be seen easily.

#### 3.6 Technique Data Analysis

In analyzing the data, the writer puts all of the students' score either experimental or control group into tables and then comparing the score between them. Next, the writer find the means difference between experimental group and control group after given the treatments. To compute and calculate the data, the writer used Microsoft Excel 2007 because the statistic value in this research can be account enough using the functions in Microsoft Excel. This technique tests the following null hypothesis "Picture series do not help students get better score in writing." Then, after the t observation value is obtained, it is checked with the critical value of t table at 0.05 levels and 0.01 levels. When the t observation value is higher than t table, so, the null hypothesis is rejected. It means that Picture series can help students get better score in writing and when t observation value is lower than the t table, the null hypothesis is accepted which means that Picture series do not help students get better score in writing.

After testing the null hypothesis whether the null hypothesis is rejected or accepted, the writer used t-test to analyze the data. The score of the whole groups



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Table 4.1 above showed that the score and mean of control group was higher than experimental group the score of control group was 1987 and the mean was 66.25 while the score of experimental group was 1968 and the mean was 66.25. However, that indicated that those two groups had equal ability in writing narrative text before the treatments was given in the other word they were not significantly different in writing ability.

#### 4.1.2 Result of Post-test Score

After the pre-test was conducted to both groups the researcher applied the Picture Series as media to teach writing narrative text for experimental group while the control group got treatments without using Picture Series. Post-test was administrated after the researcher had done the treatments; the test was same as in pre-test with the same topic. The result of post-test score and means of the experimental and control group are presented in the bellow:

 Table 4.2 the post-test scores and means of experimental and control group

Group	N	Score	Mean 71.57	
Experimental	30	2147		
Control	30	1941	64.70	

Table 4.2 above showed that the score and mean of experimental group was higher than control group. The score of experimental group was 2147 and control group was 1941. It was definitely clear that the mean of experimental group also higher than control group, from the table above

the mean of experimental group was 71.57 and control group was 64.70. It was clearly seen that there was an improvement in student's writing ability of experimental group, it was happened because the experimental group had been given the treatments by using Picture Series.

 Table 4.3 the result of Standard Deviations of both experimental and

 control group.

Group	N	Mean	SD 8.63	
Experimental	30	71.57		
Control	30	64.70	7.55	

Table 4.3 above showed that the standard deviation of experimental group was higher than control group. In this step the writer could not conclude whether there is significant difference or not because this was not final calculation. Next step calculated standard error of the difference of both experimental and control group. This table bellows showed the result of standard error of the difference of both experimental and control group.

 Table 4.4 the result of standard error of the difference of experimental and control group

Group	N	SD	S <sub>DX</sub>	
Experimental	30	8.63	2.13	
Control	30	7.55		

Table 4.4 above showed that the calculation of standard error of the difference between experimental and control group was gained from the result of standard deviation of both experimental and control group and the

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From the table 4.5 above, it can be seen that there were two steps to obtain the t-value, first step was from pre-test and second step was from post test. The calculation of both pre-test and post-test have similar steps, which first step was finding the mean, second step was finding the standard deviations, third step was finding standard error of difference, and the last step was calculate t-value by using t-test formula. The t-value of pre-test was calculated by using t-test formula and the result was 0.29 then it was compared with the t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045. From the result above the t-value of pre-test of both experimental and control class was smaller than the t-table, it can be concluded that there was no significant difference between those two groups.

Meanwhile, the second step was the t-value of the posttest also calculated by using t-test formula and the result of the t-value of posttest of both experimental and control group was -3.23 then it was compared with t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045. From the result above t-value of post test of both experimental and control group was higher than t-table. It can be concluded that there was a significant different between experimental and control group.

# 4.2 Hypothesis Testing

# 4.2.1 Hypothesis Pre-test

In chapter one the hypothesis had been stated that the students who are taught writing narrative by using picture series score higher than those who are taught without picture series. There were two hypothesis, alternative hypothesis and null hypothesis. From table 4.5 above it can be seen that the result of the t-value was 0.29 while the t-table was 2.045 it means that the t-value was lower than t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045.

The result above showed that there is a significant difference between experimental and control class. The null hypothesis which said that there is no significant difference between the students who are taught using picture series and those who are taught without picture series was accepted. While the alternative hypothesis which said that there is a significant difference between the students who are taught using picture series and those who are taught without picture series.

# 4.2.2 Hypothesis Post-test

In post test, the writer also stated the hypothesis. There were two hypothesis, alternative hypothesis and null hypothesis. From table 4.5 above it can be seen that the result of the t-value was -3.23 while the ttable was 2.045 it means that the t-value was higher than t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045 The result above showed that there is a significant difference between experimental and control class. The null hypothesis which said that there is no significant difference between the students who are taught using picture series and those who are taught without picture series, was rejected. While the alternative hypothesis which said that there is a significant difference between the students who are taught using picture series and those who are taught without picture series.

### 4.3 Discussion

As stated in chapter one that the aim of this study was to compare the score between the students who have been taught narrative text by using picture series and those who have not. The writer calculated the difference within two steps by using pre-test calculation and post-test calculation. Those two steps also have similar procedures to calculate the data, which first procedure was finding the mean, second procedure was finding the standard deviations, third procedure was finding standard error of difference, and the last procedure was calculate t-value by using t-test formula.

Table 4.5 above showed the result of t-value was higher than  $t_0$  table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045. It is proved that there is a significant difference between the students who have been taught narrative text by using picture series and those who have not.

Furthermore, the scores of the students who have been taught procedure text by using picture series (experimental group) also higher than the students who have not (control group), it can be seen from table 4.2 above the sum of scores and mean of post-test of experimental group was higher than control group.

Then after t-value of t-test of both pre-test and post-test were gained, they were compared with t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045 before giving the treatments, the pre-test was given to the both experimental and control groups by using the same topic of narrative text, the topic was "The Rabbit and The Turtle"

After the pre-test was administered to the both groups, the writer did treatment to the experimental group and the control group. The assessment used five aspects: The Asspect of Content, The Aspect of Organization, The Aspect of Vocabulary, The Aspect of Language Use, and The Aspect of Mechanics.

#### 4.3.1 The aspect of content

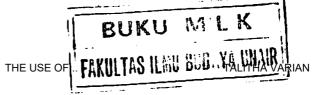
The first discussion is the discussion of content. From the statistical computation, picture series do not help the students to get better achievement in the aspect of content. However, in the application, it can be seen that the students' mean score in the experimental group is increased. The pretest score is 19.30 and the post test is 20.30. The ESL Composition

Profile states that the students' score is on the level of "Fair to Poor". The score in this level ranges from 21 to 17. The students' score in the control group is also on this level. The mean score in the pretest is 19.33 and the mean score in the posttest is 20.97.

This proves that technique cannot make different achievement between the two groups. Either the experimental group or control group's means score increases and decrease some points. Risky, the student in the experimental group develops the content of her writing well. Although the idea in the pretest and posttest is the same, he is able to dig the idea more so that the story no longer "short". He adds some events on the posttest. This also happened in Kevin the student from the control group. He has improvement in writing narrative.

Then, the mean scores in the treatment are cheeked. From the treatment 1 up to the treatment 2, the mean score in experimental group increased, from 17.8 to 19.4. This development of score implies that picture series helps students in exploring ideas. Those pictures can be a kind of raw material in making a story. From one single picture, students usually can make a long paragraph. The first picture in the treatment 1 and the last picture in the treatment 2 for instance, made the students to write quite a lot although they still have difficulty to select vocabulary and construct sentences, like these examples:

Once upon a time lived a crocodile his name is Ben. Everyday, he liked ate mango on the field because he like mango so much. <u>He was</u>



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naughty crocodile. Once day. He went to the field. He met with her friends Kiki and Bubu. (Mirza)

A long time ago, there lived a crocodile named Ken. He was naughty. He liked mango. It was his favorite food. He had two friends their named Sherly and Kiki. One day, Ken went to jungle for found mango. (Latifah)

Once upon a time lived there was a naughty crocodile and his friends, his name is Bubu. Everyday he played with his friends in a manggo field because he liked manggo. He was naughty. Once day, he walk around to the jungle to steal mango. (Ratna)

One day, a monkey named lutung wanted to cross the river. He saw a turtle named kukua. Lutung asked kukua to help him. Finally, kukua helped lutung to cross the river. After crossed the river, lutung saw banana's plants then he planed to steal the banana. (Sarah)

This is because pictures are able to say more than thousand words (Sadiman et al, 1993, p. 29). Besides that, using picture series also stimulates students' imaginative powers (Heaton, 1997, p. 133). By using imagination, the raw materials from the picture can be a nice used in writing. Therefore, the aspect of content in experimental group is well developed.

Compared to control group, using picture series is more efficient. When treatments were conducted, the students in the control group usually waste their time to decide what they would say on their writing. Some students spend 10 or 15 minutes to start their writing and usually they were in hurry to finish their job in the remaining time. The mean score in this group is up. In treatment 1, they get 18.1. Then it decreases to 17.9. Afterwards, it increases to 20.9 and decreases again to 19.4. It seems that it depends on the theme difficulty. When the topic was easy and quite familiar with them, they can write well. For example, the topic about result presented that the standard error of the difference between experimental and control group was 2.13. As the final calculation, then the writer calculated the t-value by using t-test formula. Table 4.5 below presented the result of t-test calculation between experimental and control group.

Table 4.5 the result of t-test calculation between experimental and control groups

Group			ean		t-value		
	N	Pre-test	Post-test	Df	Pre-test	Post- test	t.05
Experimental	30	64.70	71.57	29	0.29	-3.23	2.045
Control	30	66.23	65.60				

From the result above it can be seen that the writer used t-test formula to calculate the t-value of pre-test and post-test of both experimental and control class. The t-test was used to know whether there was a significant difference between experimental and control class, the used of t-table was as a comparison if the result of the t-test was higher it means that there was significant difference between two groups meanwhile if the t-test was lower than the result of the table means that there was no significant difference between two groups. So the result of the t-test should be higher than t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 in order to prove the hypothesis as stated in chapter one the students who have been taught writing narrative by using picture series score higher that those who have not. Lutung and Kukua is relatively easy for them because they ever know the story. From the key word that the teacher gave about Lutung and Kukua also could give the students "picture" in their mind. Therefore, they write quite fluently about that. But, when they are asked to write about "The Swan and The Golden Eggs", they have difficulty. It is rarely for all the students to know systematically well about the story.

However, in experimental group, this obstacle was rather reduced by serving picture series. Thus, the students do not have thought what they should write. They have already had the raw material on the picture and they just create and develop the story.

To be underlined here, the development of the story itself depends on the familiarity of the story with the students. When the picture says something familiar with them, they usually can write a lot. On the other hand, when the pictures are not familiar or about the students' knowledge, they cannot develop the content of their writing well.

#### 4.3.2 The Aspect of Organization

Second is the discussion of organization. From the statistical computation, picture series do not help the students to get better achievement in the aspect of organization. The same with the aspect of content, the students get better score but cannot achieve highest level for the aspect of organization. The mean score of organization in experimental group increases from 12.87 in the pretest to 16.60 in the posttest. While in

control group, this aspect increases from 12.83 to 15.93. Both groups are on the level of "Good to Average". Their writing is somewhat choppy, loosely organized but main ideas stand out. Moreover, the confusing ideas are developed to be the idea with limited support. The students succeed in making their writing logical although it is a little bit incomplete sequencing.

However, doing writing exercise day after day is able to improve someone's writing ability (Hernowo, 2001, p. 118). This also happens in both groups whether they are exposed to the picture series or not. The more they try to write, the more they could organize their ideas.

In the treatment 1, for example, students in control group are confused to state and organize their thought. At that time, many students asked about the assignment such as how the story is, what the sequence of time is, what the type of essay development is; who is the main character is, and so on. But, in the next meeting, they get used to it. Their writing flows better, move from one event to another.

From the score in the treatment, it can be known that doing writing exercise will improve the way they organize their ideas. The mean score in the control group, for example, increases from 11.8 and 13.1. In the treatment 1, their ability to organize the ideas is in the level of "Fair to Poor". While in the treatment 2, their ability increases to the level "Good to Average". On the other side, the mean score in the experimental group also improved. They get 11.7 in the first treatment. Then, the mean score increases to 13.4 and followed by 15.1. They get the higher level, too, like the control group; from "Fair to Poor" to "Good to Average". Compared to the control group, these numbers are higher. It means that the students' performance in the experimental group is better in mastering this aspect. It is because the picture series could be an outline in writing activity (Wright, 1983, p.57). Making on outline gives good result in writing activity. The ideas can be stated step by step clearly. The writer can pay attention to the unity and coherence of his writing.

However, not all the students got the same mark; some of them got their mark decreases. This fact says that sometimes, picture ties the students to organize their own ideas. They are not free to develop their writing and organize it differently as they like and know.

The chronological events on the pictures are not always the same with the event that students know themselves. Maziyatul (the experimental group) is a good example for this.

A man and his wife owned a very special goose. Every day the goose would lay a golden egg, which made the couple very rich. "Just think," said the man's wife, "If we could have all the golden eggs that are inside the goose, we could be richer much faster." "You're right," said her husband, "We wouldn't have to wait for the goose to lay her egg every day."So, the couple killed the goose and cut her open, only to find that she was just like every other goose. She had no golden eggs inside of her at all, and they had no more golden eggs. (Maziyatul) They write quite a little. Although it already has had unity and coherence in its organization, it seems to be lack of imagination. Therefore, this work places her to the level of "Good to Average" with the grade: 16.

The sum up, both groups do succeed in developing their ability to organize their writing. Their mean score in the pretest puts them one on the level "Fair to Poor". Furthermore, after the posttest is conducted, their level increases to "Good to Average". After those scores are computed by t-test procedure, it is said that the picture series do not help them to get better achievement in the aspect of organization. However, while doing the treatments, the students in the experimental group get higher score than the treatments, the students in the experimental group get higher score that the students in the control group. Therefore, when teacher wants to increase the student's ability to organize their thought in a piece of writing, the use of picture series is suggested.

### 4.3.3 The Aspect of Vocabulary

Third is discussion of vocabulary. From the statistical computation, picture series do not help the students to get better achievement in the aspect of vocabulary. However, in the application, it can be seen that the students' mean score in the experimental group is increased. The mean score in the experimental group increases from 11.47 in the pretest to 14.00 in the posttest. On the other hand, the mean score in control group reaches 11.80 in the pretest and it decreases to be 14.55 in the post test.

The development of the students' vocabulary mastery can be seen in the treatments. From the treatment 1 up to the treatment 2, the mean score in the experimental group progresses from 10.6 to 11.6. Pictures provide the students with information to refer to, including objects, actions, event, and relationship (Wright, 1983, p. 38). The pictures create a meaningful context for the students. The illustration on the pictures stimulates the students to transfer and state in a form of words, phrases or sentence. This indicates that the pictures are quite helpful for the students in experimental group.

However, without pictures series, the students in the control group perform progress, too. The mean score is almost the same with the one in the experimental group. The mean score of the control group in the treatment 1 is 10.6, while the treatment 2 is 11.4. When the first treatment is conducted, the students not only in the control but also in the experimental group have difficulty in determining the vocabulary for their writing. They open dictionaries most of the time. They often ask their friends to translate words, phrases, or sentences. In this period, the technique of translation from Indonesia to English is established, such as *in there, next day grave the fish grow become gold plant (Rosida). Then fish bones growed so flower (Rizky), etc.* 

Regarding the progress from the pretest and the posttest score, the control groups' level raises from "Fair to Poor" to the level "Good to Average". The change of the level also happens in the experimental group.

It means that exposing the picture series is not the only way to help the students get better achievement in the vocabulary aspect.

### 4.3.4 The Aspect of Language Use

Fourth is the discussion of language use. From the statistical computation, picture series do not help the students to get better achievement in the aspect of language use. However, in the application, it can be seen that the students' mean score in the experimental group is increased. The language use in the experimental group increases from 11.57 in the pretest to 14.13 in the posttest. On the other side, the mean score of the pretest in the control group is 13.07. It increases in the posttest to 15.03. The mean score in the experimental and control group increases but it cannot change the level they get. Although the experimental group is given picture series as teaching aids, the experimental group cannot avoid that they still have the predicate "Fair to Poor" in their language use aspect, just the same as the control group. Some sentences are found to correct, as the following examples:

The crocodile and her friends go to the mango's field. (Siti aminah) Crocodile went to forest for found the woods (Nuricha) One day she ordered wash in river (Fanani) He wan stealed the mango (Nurdina) They are is very happy (Ni Komang) etc. This proves that the technique cannot make different achievement between the two groups. The purpose of writing is for communication (Bram, 1995, p. 25). The use of language here is very important to convey a message to readers. In the experimental group, the ability to master language use increases from 10.8 to 12.3. While in the control group, the development of the mean score is from 10.6 and 12.0. The ability to arrange sentences are one aspect to make the communication in writing succeeds (Keraf, 1989, p. 35). Therefore, the group that has better intelligence has better improvement in the language use so that they can deal with simple/complex construction, tense, word order, article, pronouns, preposition, etc.

#### 4.3.5 The Aspect of Mechanics

Fifth is the discussion of mechanics. From the statistical computation, picture series do not help the students to get better achievement in the aspect of mechanics. However, in the application, it can be seen that the students' mean score in the experimental group is increased. The mean score in the experimental group increases from 2.90 in the pretest to 3.17 in the posttest. While in the control group, the mean score increases from 2.80 in the pretest to 3.43 in the posttest. This proves that the technique cannot make different achievement between the two groups.

Like the language use, the mechanics is one aspect that influenced by someone's intelligence and also frequency to apply the mechanic aspect in continuous practices. The mean score in the experimental group increases from 2.6 and 2.8. In the control group, this aspect increases from 2.63 to 2.93. The two groups here succeed in developing mechanic mastery, from level "very poor" to the level "fair to poor". Thus, there are frequent errors of spelling such as *and than* (and then), *callenge* (challenge), *stil* (steal), *letter* (later), *enought* (enough), etc

Moreover, the students cannot master how to use capitalization and punctuation. Their sample of writing showed that they still do not know where to put comma or full stop.

# 4.4 The Total Scores

The last is discussion of total mark. In the pretest, the experimental group obtains 65.60 and the control group obtains 66.23. Both groups progress in the treatment 1 up to the treatment 2. This development is influenced by the existence of teaching aids or not. The use of picture series in the experimental group is able to improve the content and organization of their writing. On the other hand, the achievement of the aspect of vocabulary, language use, and mechanics does not merely depend on the use of picture series.

After the treatment, the mean score of the experimental group reaches 71.57. While the control group reaches 64.70. It means that the students' level increases from experimental group. While in control group, the students' level decrease. There were some factors; it depends on the familiarity of the story with the students, the students' mood, evironment, etc. Thus, writing exercise in the treatment give a chance for the students to improve their writing better and better.

The result above also showed that the mean of pretest of experimental group was smaller than control group. The mean of experimental group was 64.70 while the control group was 66.23. It happened before the treatment was given to experimental group. After treatment was given the result of post test showed that the mean of experimental was higher than control group. The mean of experimental group was 71.57 while the control group was 65.60.

Then the t-value was calculated by using t-test formula, there were two different parts they were pre test and post test. The result of t-value of pretest of both experimental and control group was 0.29 then it was compared with the t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045 from the result above the t-value of pretest of both experimental and control groups was smaller than the ttable, it can be concluded that there was no significant difference between those two groups.

Another part was the result of t-value of post test of both experimental and control group, the t-value of post test was -3.25 then it was compared with the t-table on the level of significance of 0.05 or 5% with the degree of freedom 29 was 2.045. From the result above the tvalue of post test of both experimental and control groups was higher than

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t-table, it can be concluded that there was a significant difference between experimental and control group.

The data above showed that picture series give significant effect in experimental group scores, writing procedure test through picture series could improve students' writing narrative text ability. There were some factors that improve students' writing ability who were taught by using picture series. First, picture series was easy to use so they could write with picture series easily, as stated by Betty (1994) that a student with a creative imagination will often learn a new language easily and enjoyable trough the use of picture while he finds it difficult to learn just from a textbook or dictionary. Second, writing narrative through picture series brought the students to new kind of situation. It would help both the students and the teacher to revise the students' writing and made writing more fun than the way it used to be, it would help the students to get ideas more realistic in understanding the narrative text and in constructing ideas to create it. that fact is similar to Betty (1994) observation that pictures enrich the classroom by bringing the topics from outside world, which are made real and immediate by the picture.

The students could predict the content of the text easily based on their understanding about the picture series. As stated by Harmer (2004) that picture are often used to present situation to help students work with grammar and vocabulary. The pictures gave the schemata to the students to construct ideas from their background knowledge and experience. As

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CONCLUSION