CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter discusses the findings of the research and discussion based on the data which is derived from the result of the effectiveness of chain story technique through *instagram* to develop the students' writing ability in learning narrative text.

4.1 Findings of the Research

The data taken from the research is analysed in this chapter. It aims to find out the effectiveness of using chain story technique through *instagram* to develop the students' writing ability in learning narrative text. The analysis is about the comparison between the students who were taught using chain story technique through *instagram* and the students who were taught using traditional method. This research was conducted in SMA Muhammadiyah 1 Surabaya by using the analysis of quantitative data. The data was taken by giving test to the experimental class and control class. The subjects of this research were divided into two classes. There are X MIA 2 as the experimental class and X MIA 1 as the control class. The tests were given before and after the students got the treatment which was provided by the writer.

Before conducting the treatments, the writer determined the materials and lesson plan (RPP). The lesson plans were made into two types. The first one was made for the experimental class which used the chain story technique through instagram. The other one was made for control class which used the scientific approach. Before conducting the pre-test for the two classes, the writer gave a try out test to another class (X MIA 1) to find out the validity and the reliability tests based on the first rater and second rater. The writer prepared a form of essay test for the students. Furthermore, the writer used a scoring rubric adapted from Oshima and Hogue's assessment. After that, the data were calculated by using Microsoft Excel and SPSS version 23.

4.1.1 The Application of Chain Story Technique through Instagram

The research was started on April 2nd to 29th 2018 in SMA Muhammadiyah 1 Surabaya. The application of chain story technique in experimental class was treated twice by the English teacher. The first time of giving the treatment was on 18 April 2018 and the second time was on 25 April 2018. The English teacher applied the lesson plan made by the writer. The writer acted as observer during the class. When the teacher needed a help, the writer helped her such as monitoring the time for practicing chain story technique through instagram.

The material of first meeting was about the structure of narrative text and its conjunction. The grammatical aspect had been already taught by the English teacher in the first semester. The students were very curious about the treatment because the teacher already told them that the writer would come. They were asked to have instagram account for learning narrative. When the writer came, they had so many questions such as "is she your friend miss?", "wow, a new teacher", "is this the time for using instagram in English learning miss?". That was a good welcome from the students who were interested to study with a new technique. The students followed the learning process well. When the teacher asked them to try to make a sentence, they could make it although they still had some mistakes in grammar. They questioned about some vocabularies that they did not know. After teaching about the material, the teacher gave the procedure of chain story through instagram. Overall, the application of first meeting worked well.

The second meeting focussed on practicing to chain the story through instagram. The teacher gave review about the previous meeting to remind them about the procedure of chain story through instagram. After that, the teacher asked them to sit with their group. The writer helped the teacher to upload the clues in the instagram which is about some scenes of Roro Jongrang legend. In one group, there might be 2 hand phones to be used to chain the story. Then, the teacher wrote a sentence to start the chain story in instagram. Next, the first group needed to continue the sentence using their own idea and language. The duration of each group to write was one minute. The teacher chose the second group randomly. The problem occurred when there were some groups which needed more than one minute to chain the story. They said that they were afraid of making grammatical mistakes. The solution was the teacher asked them to write anything based on their ability. After the chain story through instagram was finished, the teacher asked the students to read their text. The teacher asked the students about sentences which were orientation, complication, and resolution. They discussed together and communicated their result. The teacher also reviewed about their grammatical errors based on their text in instagram. In addition, the students were enthusiastic to chain the story because they did cooperate to make the sentences. To sum up, the second meeting was successful to make the student practice chain story technique through instagram.

	Pre-Research					
	Group	Activity				
Monday 2 April 2018	-	Sending the permission letter to the school				
Tuesday	Try out class (X MIA 1)	The writer conducted a try out to a class which has same ability as control and experimental classes.				
4 April 2018	-	The writer met the English teacher to give the lesson plans for teaching in control class and experimental class.				
	Research Proce	ess				
Monday 16 April 2018	Experimental and Control Class	The writer gave the pre-test for both experimental and control classes.				
Tuesday 17 April 2018	Control Class (First meeting)	The teacher taugh them about the structure of the text and practiced the chain story through instagram.				
Wednesday 18 April 2018	Experimental Class (First Meeting)	The teacher taugh them about the structure of the text and practiced the				

Table 4.1	Research	Schedule

		chain story through instagram.
Tuesday	Control Class	The teacher gave instructions to the
24 April 2018	(Second meeting)	students to practice the chain story through instagram.
Wednesday	Experimental Class	The teacher gave instructions to the
25 April 2018	(Second meeting)	students to practice the chain story through instagram.
Thursday	Experimental and	The writer gave the post test for both
26 April 2018	Control Class	experimental and control classes.
	Research Closin	ng
Friday	_	Post test is assessed by the English
27 April 2018		teacher and the writer.
	-	Asking the letter of finishing the
		research from the school

1.1.2 The Validity and Reliability Test

4.1.2.1 The Result of Validity Test

There were two tests which needed to use before doing the experiment. Validity test was validated by the expert judgements to evaluate about the content of the test for the try out and the lesson plan. The validators were Sofi Yunianti S.S., M.Pd as the lecturer of writing and Daniar Prastiwi S.Pd as the English teacher in SMA Muhammadiyah 1 Surabaya. After the writer conducted a try out test to a class which was different from control and experimental classes, the data was analysed using reliability test. The reliability test was used to analyse the data taken from the first and the second ratters by using SPSS.

No.	Name	Validation of	the Test	Date of Validation	
110.	Tunie	Yes	No	Dute of Vandation	
1	Sofi Yunianti S.S., M.Pd		-	21 March 2018	
2	Daniar Prastiwi, S.Pd		-	23 March 2018	

Table 4.3 The Result of Validity Test

Test Instruction	Core Competence	Basic Competence	Indicator	Valid
 Write a narrative text about the legend of Roro Jonggrang based on your knowledge! Make sure that the paragraph consists of orientation, complication, resolution, and reorientation! You have 60 minutes to write your story. 	 Understanding, applying, analysing the factual, conceptual, and procedural knowledge based on their curiosity about technology, culture, art, humanity related to the cause of the events to solve the problems. Analysing, presenting, and creating something abstract to something concrete referring to what the students learn ain the school by using the learned method. 	 3.6 Analysing the social function, text structure, and linguistic structure on the statement or action of events which already happened in the past based on the context. 4.6 Arranging both spoken and written texts to state and ask about past event which refers to the social function, text structure, linguistic unsure correctly based on the context. 	 Students are able to understand the component of narrative text such as character, plot, setting, conflict, and solution in the text. Students are able to analyse the structure of narrative text such as orientation, complication, and resolution. Students are able to reconstruct the text based on their own sentences. 	

4.1.2.2 The Result of Reliability Test

Correlation is the tool to find out the result of reliability test. It aims to know the reliability of the scores examined by the ratters. According to Sugiyono (2011, 184), there is a criteria to interpret the result of reliability test by using correlation. There are very low (0,000-0,199), low (0,200-0,399), moderate (0,400-0,599), strong (0,600- 0,799), and very strong (0,800-1,000) (Sugiyono, et. al). Inter-ratter was done by the first ratter and the second ratter. The first ratter of this research is the English teacher, and the second ratter is the writer. The result of reliability test was analysed by using SPSS version 23. The result of the validity test by using SPSS is shown in the following tables.

Table 4.4 Result of Realibility Test

Descriptive Statistics

	Mean	Std. Deviation	Ν
Rater1	72,0667	10,24841	30
Rater2	68,8333	9,76653	30

Correlations

-		Rater1	Rater2
Rater1	Pearson Correlation	1	,892**
	Sig. (2-tailed)		,000
	Ν	30	30
Rater2	Pearson Correlation	,892**	1
	Sig. (2-tailed)	,000	
	Ν	30	30

Based on the result of reliability, the ratters had small difference in assessing the students' paragraph. The mean of the first ratter is 72, 06 and the mean of the second ratter is 68.97. The result of reliability is 0,892 which mean that it is classified into very strong reliability. It can be concluded that both ratters has very strong reliability to assess the students' test.

4.1.2 The Result of Pre Test and Post Test in both Classes

The writer showed the result of pre-test and post-test both in experimental and control classes. The data could be seen in the table in the next page.

		Control Class		Experimental Class	
Student	Passing Grade	(X MIA 3)		(X MIA 2)	
Student		Pre Test	Post Test	Pre Test	Post Test
1	75	77	80	83	90
2	75	90	90	52	75
3	75	68	70	64	78

Table 4.5 Pre-test and Post-test Scores in both Classes

4	75	78	80	60	76
5	75	77	75	60	80
6	75	59	65	67	78
7	75	83	85	55	65
8	75	80	83	75	69
9	75	84	90	42	68
10	75	65	73	64	66
11	75	74	80	62	70
12	75	71	76	72	85
13	75	73	77	52	70
14	75	70	74	90	96
15	75	70	75	64	68
16	75	75	84	82	90
17	75	78	80	66	78
18	75	67	60	73	70
19	75	64	65	61	86
20	75	54	61	94	97
21	75	70	84	78	84
22	75	73	75	88	86
23	75	71	70	75	80
24	75	73	75	70	78
25	75	65	70	73	82
26	75	50	60	73	79
27	75	60	65	73	79
28	75	59	60	73	80
29	75	62	60	90	95
30	75	73	75	55	68
	Mean	70,3	73,6	69,6	78,86
	The highest score	90	92	94	97
	The lowest score	54	61	42	65

Based on the data above, we can see that the score of control and experimental classes does not have far difference. The mean of experimental class is 69.6 and the mean of control class is 70.3. The lowest score in experimental class is 42 and the highest score is 94. In other hand, the lowest score in control class is 54 and the highest score is 90.

Based on the data above, we can see that the score of control and experimental classes does not have far difference. The mean of experimental class is 78.86 and the mean of control class is 73.60. The lowest score in experimental class is 65 and the highest score is 97. In other hand, the lowest score in control class is 61 and the highest score is 92.

4.1.3 The Percentage both Classes of Pre-Test and Post-Test

Table 4.6 The Percentage of Pre-test and Post-Test of Experimental Class

Passing Grade	Experimental Class		Percentage of the Test	
	Pre Test	Post Test	Pre Test	Post Test
≥75	8	21	26,67%	70%
	9	17	30%	56,67%

According to the table above, it can be seen that the comparison of the pretest and post-test in experimental class shows the percentage that exceed the passing grade of pre-test is 26,67% and the post test is 70%. The increasing is 43%. According to the table above, it can be seen that the comparison of the pretest and post-test in experimental class shows the percentage that exceed the passing grade of pre-test is 30% and the post test is 56.67%. The increasing is 26.67%.

4.1.4 The Result of Normality Test in both Classes

The writer conducted a pre-test to both control and experimental classes. After that, the data was analysed with normality test to find out whether the data taken was in a normal distribution. The criteria of how to interpret the result of normality test is by using terminology of which means the significant (sig.). If the score of (sig.) is more than alpha (α) 0.05, it means that the data has normal distribution. The hypothesis could be seen in the following:

H0 push away, if P (Value) > (α) 0,05, so the data is in normal distribution

H1 push away, if P (Value) $< (\alpha) 0,05$, so the data is not in normal distribution

The normality test was calculated by using SPSS version 23 of Kolmogorov-Smirnnov test. The criteria of normality was analysed by the result of P-Value or (sig.). Furthermore, the value of alpha (α) is 0.05.

The normality test used was Kolmogorov-Smirnov in SPSS version 23. According to the table above, the value of both experimental and control class are same significance which is 0,200. As the criteria above, if the value of significance is more than 0.05, it means that the data has the normal distribution. It can be concluded that the data is in normal distribution.

The students' score of post-test was calculated to find out whether the data has normal distribution or not. The test of normality both experimental and control classes was analysed by using Kolmogorov-Smirnov test in SPSS version 23. The criteria of how to interpret the result of normality test is by using terminology of which means the significant (sig.). If the score of (sig.) is more than alpha (α) 0.05, it means that the data has normal distribution. The hypothesis could be seen in the next page.

		Control	Class	Experime	ental Class
		Pre test	Post test	Pre test	Post test
Ν		30	30	30	30
Normal	Mean	70,43	73,87	69.60	78,87
Parameters ^{a,b}	Std. Deviation	8,955	8,997	12.472	9,062
Most Extreme Differences	Absolute	,114	,117	.009	,136
	Positive	,006	,105	.009	,136
	Negative	-,114	-,117	076	-,095
Test Statistic		,114	,117	.099	,136
Asymp. Sig. (2-ta	ailed)	,200	,200	.200	,164

Table 4.7 The	Result of	f Normality	Test
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a. Test distribution is Normal.

Based on the result of normality test, the writer concludes that the result of normality test in post-test both control and experimental group is in normal distribution. The sig. of experimental class is 0,164 which is more than 0,05. Furthermore, the sig. of control class is 0,200 which is more than 0,05. So, H0 is accepted and the data is in normal distribution.

4.1.5 The Result of Homogeneity Test

After conducting the normality test to measure that the data is normal. The writer tested the data by using homogeneity test. It aims to know that both control and experimental classes have the same ability. The main data used in homogeneity test is the score of pre-test both control and experimental group. The hypothesis of homogeneity test is in the following:

If P (Value) > (α) 0,05, there is no different between experimental and control							
class (homogeneous)							
If P (Value) < (α) 0,05, there is different between experimental and control class (not homogeneous)							

The criteria of how to interpret the result of homogeneity test is by using terminology P- value which means the significant (sig.). If the score of (sig.) is more than alpha (α) 0,05, it means that there is no different between experimental and control class and the data is homogeneous. The result of homogeneity test using SPSS can be seen below.

Table 4.8 Result of Homogeneity Test

score

Levene Statistic	df1	df2	Sig.
2,913	1	57	,093

Based on the table above, it can be seen that p-value (0,093) is higher that alpha (0,05). It means that the data is homogeneous. It can be concluded that H₀ is accepted which means that both classes have same characteristic.

4.1.6 The Result of T-Test

After testing the data by using normality and homogeneity tests, the next step is analysing the T-test. The data of post-test in control and experimental classes were calculated by using independent sample T- test in SPSS version 23. It aims to find out the significance difference between control and experimental classes. The hypothesis is formulated in the following

- H_o is there is no significant difference between the students who are taught by using chain story through instagram and the students who are taugh by using chain story through instagram.
- H₁ is there is significant difference between the students who are taught by using chain story through instagram and the students who are taugh by using chain story through instagram.

The criteria are based on the value of T count is in the following:

If T count < T table, so it means that H₀ is accepted

If T count > T table, so it means that H_0 is pushed away

The test criteria based on the value of P-value is in the following:

If P-value $> (\alpha) 0.05$, so it means that H₀ is accepted

If P-value $< (\alpha) 0.05$, so it means that H₀ is pushed away

 Table 4.9 Result of Independent Sample T-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-	Mean Differe	Std. Error Differe	95% Confidence Interval of the Difference	
		F	Sig.	Т	Df	tailed)	nce	nce	Lower	Upper
Score	Equal variances assumed	,013	,908	2,145	58	,036	5,000	2,331	,333	9,667
	Equal variances not assumed			2,145	57,9 97	,036	5,000	2,331	,333	9,667

From the calculation above, it can be analysed that T count is 2,145. The total of the students in each class is 30 so the T table is 1,670. It means that T count (2,415) is more than T table (1,670). According to the criteria, if T count is more than T table, it means that there is significant difference between the students who are taught by using chain story through instagram and the students who are taugh by using chain story through instagram. It can be concluded that H_0 is pushed away and H_1 is accepted.

From the result above, it can be seen that the value of P-value of both classes is 0,036. According to the value of p-value, it is lower than alpha (0,036 < 0,05), so H₀ is pushed away. It means that H₁ is accepted which is there is significant difference between the students who are taught by using chain story through instagram and the students who are taugh by using chain story through instagram.

4.1.7 Eta Squared

The writer counted the eta squared to calculate the effect size of the using of chain story technique through instagram to develop students' writing ability in learning narrative text. There is a criteria of the result in eta squared to measure the effect of the treatment (Pallant, 2010). First, if the score is 0,00 - 0,01, it means that it has small effect. Second, if the score is 0.06, it means that it has

moderate effect. The last, if the result is more than 0,14, it means that it has large effect.

-	Paired Differences								
			Std. Deviatio	Std. Error	95% Confidence Interval of the Difference				Sig. (2-
		Mean	n	Mean	Lower	Upper	t	df	tailed)
Pair 1	pretest_experim ental - posttest_experi mental	- 9,266 67	7,79891	1,42388	12,1788 3	-6,35451	6,508	29	,000

Table 4.10 Result of Paired Samples T-Test

Eta square = Mean : SD = 9,26:7,79

To calculate the eta squared, the writer analysed from the result of paired sample T-test. Here is the result above. It could be analysed that the mean is 9,26 and the standard deviation is 7,79. By dividing mean and standard deviation, we could find the result of eta-squared. The result is 1,18 which means that it is classified into large effect. As a result, applying the chain story through instagram has a large effect to develop the students' writing ability in narrative text.

4.2 Discussion

The result of the research has shown that the using of chain story technique is effective to develop the students' writing ability in learning narrative text. In addition, there is significance different before and after giving the treatment which is the implementation of chain story technique through instagram. There are three proves in the following to support the statement that the technique is effective. The chain story technique is proven to be effective due to 3 aspects; the mean score of both classes; the T-test calculation result; and the calculation of the students who passed the passing grade of English.

First, the data analysis can be interpreted based on the mean score of both classes. The mean score of control class in pre-test is 70,3 and the post test is 73,60. The improvement based on the post test and pre-test in control class is 3,3. In other hand, the mean score of experimental class in pre-test is 69,6 and the post test is 78,86. The improvement based on the pre-test and post-test in experimental class is 9,26. Whereas, the improvement of experimental class is 9,26 which is higher than the improvement of control class. Based on the mean calculation, it is found that the mean score and the improvement of experimental class is better than control class. In short, it is because the implementation of the chain story technique through *instagram* effectively develops students' writing ability in learning narrative text.

The second supporting data is found from the T-test calculation in SPSS version of 23. Analysing the data using t-test calculation in SPSS, the writer found the result that the value of T_{count} is 2,145 and the value of T _{table} is 1,670 with degree of significance 5%. The result indicates that the T _{count} (2,145) is more than T _{table} (1,670). It means that H₀ (null hypothesis) is pushed away so it can be inferred that H₁ (alternative hypothesis) is accepted. Accordingly, there is significant difference between the students who are taught by using chain story through *instagram* and the students who are not taught by using chain story through *instagram*.

The third criteria is about the students who pass the passing grade. In control class, there are 9 students in pre-test and 17 students in post-test who can pass the passing grade. The percentage of control class who passes the passing grade raises from 30% to 56,67%. In contrast, the experimental class has different amount of students who can pass the passing grade. There are 8 students in pre-test and 21 students in post-test who can pass the passing grade. The percentage of experimental class who passes the passing grade raises from 26,67% to 70%. The improvement of percentage in control class is 26,67%. In other hand, the improvement of percentage in control class is 43,33%. It shows that the

percentage of the students who can pass the passing grade in experimental class is more than control class. To sum up, the using of chain story through *instagram* is effective to develop students' writing score in narrative text.

The finding of the research is in line with the statement of Bronagh (1993) that chain story is a kind of collaborative writing that is applied to solve the students' problem. Using chain story technique, teacher can provide the students some clues in writing. After that, the students will create and reconstruct the text by using their choices as creative as they can. Some problems that experienced by the students are the lack of vocabulary and the difficulty of idea. This technique is effective to be implemented because the students can share their idea with the other students to chain the story through *instagram*. Therefore, the collaboration between chain story and *instagram* is a new research. There are many researches about chain story and *instagram* but no one combine that technique with the teaching media.

The best part of using the chain story technique is the enthusiasm of the students during the class. They are motivated to make the sentence in short duration and post the chain story in *instagram* in chronological order. The limitation of making the chain story is only a minute, so they compete to be the fastest group to post with minimum mistake. What happened in the class during the experiment is in line with the statement of Boyd. Students are encouraged to use their imagination and enjoy the activity. The most important advantage in applying the chain story is that the students enjoy and feel interested to follow the class (Boyd in Putra, 2014). Learning is not only about how teacher has brilliant students but also how they feel enjoy to learn something new. If the students enjoy the class, they will be motivated and have a better output and understanding.

The weaknesses of this technique is that the rules controlled by the teacher. If the practice of chain story in the class is conducted, the teacher plays a role as a controller. The effect is the students cannot feel free to write because each group should continue the sentence in less than one minute. The solution of the problem is to let the students do the chain story technique without giving

limited duration. The teacher gives 15 minutes for the students to do the chain story in their group. The teacher may give a start sentence and same topic to do the chain story. After that, the students do the chain story with their own group. After the time is up, each representation will read their narrative text with different complication and resolution. The texts which are created will be various and the students will feel freer to write.

Instagram as a social media is effective to make the students feel encouraged to learn the material. They were curious before the class because the teacher asked them about their *instagram* account. They did ask more and more what the function of *instagram* itself for learning English. Young learners spend many hours to keep in touch with their social media such as *instagram*. They think that *instagram* is used only for connecting and being exist in social media. The popularity of *instagram* can be used by the teachers to develop the teaching media. Teachers can collaborate and combine such tools to keep in touch with students or to have an online learning for the students (Zhang: 2013). During the research, there was no difficulty to give the procedure of the chain story technique through *instagram* because they were very familiar with the tool.

Before giving the treatment in the experimental class, the writer had an observation in the class. When the writer arrived, the students were curious and predicted that the writer would teach them using instagram. They did feel enthusiastic to learn English with instagram. When the teacher asked them about how many person who have instagram account, all the students anwered that all of them had the instagram account. Overall, they were familiar with instagram and they could easily understand about the procedure which was given by the teacher in doing chain story technique.

The problem occurred when there were some groups which needed more than one minute to chain the story. They said that they were afraid of making grammatical mistakes. The solution was the teacher asked them to write anything based on their ability. After the chain story through instagram was finished, the teacher asked the students to read their text. The teacher asked the students about sentences which were orientation, complication, and resolution. They discussed together and communicated their result. The teacher also reviewed about their grammatical errors based on their text in instagram. In addition, the students were enthusiastic to chain the story because they did cooperate to make the sentences. To sum up, the second meeting was successful to make the student practice chain story technique through instagram.

The result of this research is shown that using chain story through *instagram* is effective to develop the students' writing ability in learning narrative text. Referring to the previous studies that were written in the chapter 2, the writer connects them with the findings of the research. First, the finding of this chapter really support the idea stated by Affan Permana Putra (2013) that chain story technique is effective to be used in teach and learn writing. In his journal, he stated that chain story did effectively improve the students' writing ability in recount text. In the writer's research, it does impact effectively to learn writing narrative text. Instagram as a teching media in this research does support the impact caused by the using of chain story technique. According to the journal of Fitri Handayani (2016), the use of *instagram* in classroom does support the learning process in creating the learners of social connected community. In this research, instagram functions as the tool to provide a media for students to create and reconstruct the text in group based on their knowledge. The previous studies do strengthen this result that chain story technique through *instagram* is effective to develop student' writing ability in learning narrative text. Moreover, those previous studies support that using the chain story technique though instagram can be applied in teaching writing any kinds of text.