

CHAPTER IV

RESULT OF THE STUDY

This chapter discusses the data which had been collected from the research in the field of study. The data are the result of experiment and control class, the result of post test experiment and control class, and the result of data analysis.

A. Description of the Data

1. The result of Pre Test, Post Test and the Comparison of Students' Speaking Score of the Control and Experiment Class

The pre test was conducted to the first experiment class in speaking class C on April 20th 2016, at 07.30 am and the post test was conducted to the first experiment class in speaking class C on May 25th 2016, at 07.00 am Then the control class was given pre test in speaking class D on April 20th 2016, at 09.30 am. Then the control class was given post test in speaking class D on May 25th 2016, at 09.00 am. The following table 4.1 of summarizes the pre test and post test score of both classes.

To find the sum, lowest score, highest score, mean and the standard deviation, the writer used manual calculation and SPSS 18.0.

Based on the result of research in Speaking Class D as control class, the highest pre test score of students control class is 68 and the lowest score of control class is 48 with sum of the data is 1108, mean is 58.32 with standard deviation is 5.218.

In contrary, the result of research in Speaking Class D as control class, the highest post test score of students control class is 80 and the lowest score of control class is 60 with sum of the data is 1388, mean is 73.05 with standard deviation is 6.778.

Based on the result of research in Speaking Class C as experiment class, the highest pre test score of students in experiment class is 76 and the lowest score of experiment class is 60 with sum of the data is 1180, the mean is 69.41 with standard deviation is 4.229.

In contrary, the highest score of experiment class for the post test is 88 and the lowest score of experiment class is 72 with sum of the data is 1384, the mean is 81.41 with standard deviation is 4.887.

Table 4.2 Frequency Distribution of the Pre Test and Post Test of Speaking Score of the Control Class and Experiment Class

Class	Categories Level				
	Very Poor	Poor	Fair	Good	Very Good
Pre Test CC	47.36	52.63	0	0	0
Post Test CC	0	26.31	52.63	21	0

Pre Test EC	0	52.91	47.05	0	0
Post Test EC	0	0	29.41	70.58	0

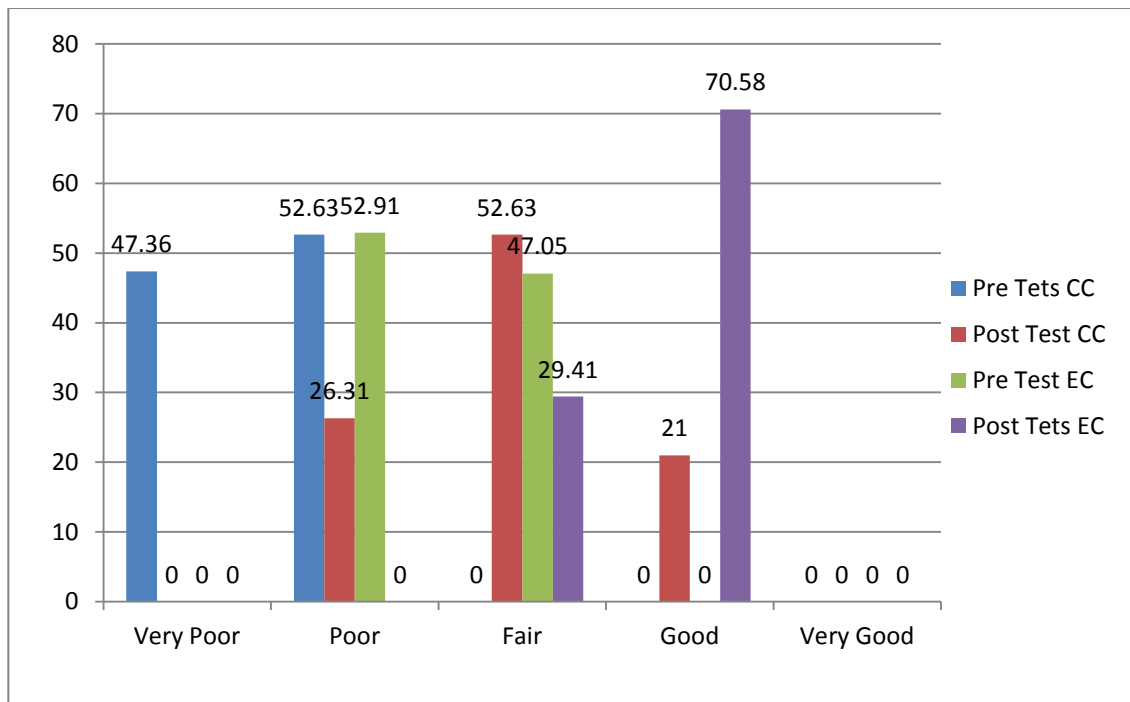


Figure 4.1 Frequency Distribution of the Pre Test and Post Test Speaking Score of the Control Class and Experiment Class

Figure 4.1 shows that the pre test and post test of students' speaking score in control class and experiment class. It can be seen that for the pre test in control class there are 10 students who got 52,63 as poor level, there are 9 students who got 47,36 as very poor level. For the post test in control class there are 5 students who got 26,32

as poor level, 10 students who got 52,63 as fair level and 4 students who got 21,00 as good level. For the pre test in experiment class there are 9 students who got 52,94 as poor level, there are 8 students who got 47,05 as fair students. For the post test in experiment class there are 5 student who got 29,41 as fair level and 12 students who got 70,58 as good level.

2. The result of Pre Test, Post Test and the Comparison of Students' Motivation Score of the Control and Experiment Class

To know the students' motivation, the writer used questionnaire. The questionnaire was given both before and after the treatment. For the experiment class in speaking class C on April 20th 2016, at 07.30 am before treatment, and it was given to the first experiment class in speaking class C on Mei 25th 2016 after the treatment, at 07.00 am. Then the control class was given the questionnaire in speaking class D on April 20th 2016, at 09.30 am. Then the control class was given the questionnaire in speaking class D on Mei 25th 2016, at 09.00 am. The following table 4.2 summarizes the pre test and post test score of both classes.

To find the sum, lowest score, highest score, mean and the standard deviation, the writer used manual calculation and SPSS 18.0.

Based on the result of writer in Speaking Class D as control class, the highest pre test score of students control class is 72 and the lowest score of control class is 56 with sum of the data is 1208, mean is 63.47 with standard deviation is 5.420.

In contrary, the result of writer in Speaking Class D as control class, the highest post test score of students control class is 76 and the lowest score of control class is 58 with sum of the data is 1279, mean is 67.32 with standard deviation is 5.726.

Based on the result of writer in Speaking Class C as experiment class, the highest pre test score of students in experiment class is 71 and the lowest score of experiment class is 55 with sum of the data is 1022, the mean is 60.12 with standard deviation is 3.839.

In contrary, the highest score of experiment class for the post test is 83 and the lowest score of experiment class is 65 with sum of the data is 1245, the mean is 73.24 with standard deviation is 5.215.

Table 4.4 The Frequency Distribution of the Pre Test and Post Test of Student'

Motivation Score of the Control Class and Experiment Class

Class	Categories Level		
	VLCA	ACA	TCA
Pre Test CC	0	100	0
Post Test CC	0	100	0
Pre Test EC	0	100	0
Post Test EC	0	94.11	5.88

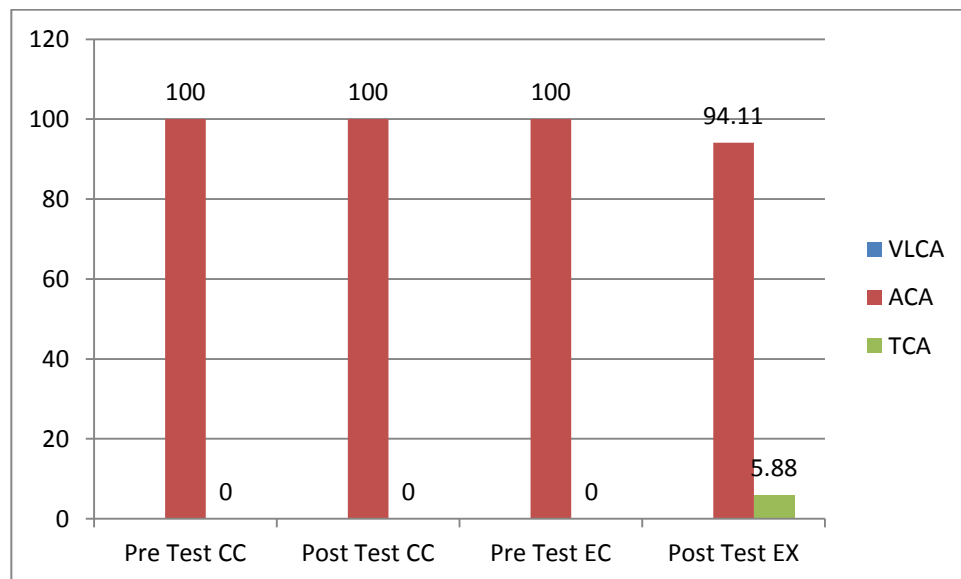


Figure 4.2 Frequency Distribution of the Pre Test and Post Test of Student'

Motivation Score of the Control Class and Experiment Class

Figure 4.2 shows that the pre test and post test for of students' motivation score in control class and experiment class. It can be seen that for the pre test in control class there are 17 students who got 100 as ACA level. For the post test in control class there are 17 students who got 100 as ACA level. For the pre test in experiment class there are 17 students who got 100 as ACA level. For the post test in experiment class there are 16 students who got 94.11 as ACA level and there was 1 student who got 5.88 as TCA level.

B. Testing Normality and Homogeneity

1. Normality Test

In this study, writer used One-Sample Kolmogorov-Smirnov Test to test the normality.

- a. Testing of normality speaking ability of pre test control and experiment class

Table 4.5 Testing of Normality one-sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Control	Experiment
N		19	17
Normal Parameters ^{a,b}	Mean	58.32	69.41
	Std. Deviation	5.218	4.229
Most Extreme	Absolute	.153	.200
Differences	Positive	.145	.160

	Negative	-.153	-.200
Kolmogorov-Smirnov Z		.666	.826
Asymp. Sig. (2-tailed)		.766	.502

a. Test distribution is Normal.

b. Calculated from data.

Based on the calculation used SPSS program, the asymptotic significance normality of control class was 0.776 and experiment class was 0.502. Then the normality both of class was consulted with table of Kolmogorov-Smirnov with the level of significance 5% ($\alpha=0.05$). Because asymptotic significance of control = $0.776 \geq \alpha=0.05$, and asymptotic significance of experiment = $0.502 \geq \alpha = 0.05$. It could be concluded that the data was normal distribution.

b. Testing of normality students' motivation for pre test of control class and experiment class.

4.6 Testing of Normality One Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Control	Experiment
N		18	17
Normal Parameters ^{a,b}	Mean	62.61	60.12
	Std. Deviation	3.534	3.839
Most Extreme	Absolute	.120	.194
Differences	Positive	.120	.194
	Negative	-.109	-.114
Kolmogorov-Smirnov Z		.510	.801
Asymp. Sig. (2-tailed)		.957	.542

a. Test distribution is Normal.

b. Calculated from data.

Based on the calculation used SPSS program, the asymptotic significance normality of control class was 0.957 and experiment class was 0.834. Then the normality both of class was consulted with table of Kolmogorov-Smirnov with the level of significance 5% ($\alpha=0.05$). Because asymptotic significance of control = $0.957 \geq \alpha=0.05$, and asymptotic significance of experiment = $0.542 \geq \alpha = 0.05$. It could be concluded that the data was normal distribution.

c. Testing of normality speaking ability of post test control and experiment class

Table 4.7 Testing of normality speaking ability of post test control and experiment class

One-Sample Kolmogorov-Smirnov Test

		Control	Experiment
N		19	17
Normal Parameters ^{a,b}	Mean	73.05	81.41
	Std. Deviation	6.778	4.887
Most Extreme	Absolute	.247	.231
Differences	Positive	.172	.160
	Negative	-.247	-.231
Kolmogorov-Smirnov Z		1.077	.953
Asymp. Sig. (2-tailed)		.196	.323

a. Test distribution is Normal.

b. Calculated from data

Based on the calculation used SPSS program, the asymptotic significance normality of control class was 0.196 and experiment class was 0.323. Then the

normality both of class was consulted with table of Kolmogorov-Smirnov with the level of significance 5% ($\alpha=0.05$). Because asymptotic significance of control = $0.196 \geq \alpha=0.05$, and asymptotic significance of experiment = $0.323 \geq \alpha = 0.05$. It could be concluded that the data was normal distribution.

- d. Testing of normality students' motivation for post test of control class and experiment class

Table 4.8 Testing of normality students' motivation for post test of control class and experiment class

One-Sample Kolmogorov-Smirnov Test

		Control	Experiment
N		19	17
Normal Parameters ^{a,b}	Mean	67.32	73.24
	Std. Deviation	5.726	5.215
Most Extreme	Absolute	.143	.147
Differences	Positive	.143	.122
	Negative	-.142	-.147
Kolmogorov-Smirnov Z		.623	.604
Asymp. Sig. (2-tailed)		.832	.859

- a. Test distribution is Normal.
- b. Calculated from data.

Based on the calculation used SPSS program, the asymptotic significance normality of control class was 0.832 and experiment class was 0.859. Then the normality both of class was consulted with table of Kolmogorov-Smirnov with the level of significance 5% ($\alpha=0.05$). Because asymptotic significance of control = $0.832 \geq \alpha=0.05$, and asymptotic significance of experiment = $0.859 \geq \alpha = 0.05$. It could be concluded that the data was normal distribution.

2. Homogeneity Test

In this study, writer used Levene Test Statistic to test the homogeneity of variance.

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.954	3	68	.420

Based on the calculating used SPSS 18.0 program, the data showed the significance was 0.420. the significance of the levene test statistic was higher than 0.05 ($0.420 \geq 0.05$). it meant that the scores were not violated the homogeneity.

3. Testing Hypothesis

The writer used One-Ways Anova to test the hypothesis with significance level $\alpha= 0.05$. The writer used manual calculation and SPSS 18.0 Program to test the hypothesis using One - ways Anova. The criteria of H_0 is accepted when $F_{value} \leq F_{table}$, and the H_0 is refused when $F_{value} \geq F_{table}$. Then the criteria H_a is accepted when $F_{value} \geq F_{table}$, and H_a is refused when $F_{value} \leq F_{table}$. Or The criteria of H_0 is accepted when the significant value ≥ 0.05 , and H_0 is refused when the significant value ≤ 0.05 .

To make sure the manual calculation, SPSS 18.0 statistic program was conducted in this research.

Table. 4.9 One-Way ANOVA manual calculation

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1795.549	3	598.516	18.216	.000
Within Groups	2234.229	68	32.856		
Total	4029.778	71			

Based on the SPSS 18.0 statistic program calculation, the result shows that Degree of Freedom Between Groups (DFb)= 3 and Degree of Freedom Within Groups (DFw)= 68 ($F_{table}=2.75$). Then F_{value} is 18.216. It showed F_{value} was higher than F_{table} ($18.216 \geq 2.75$). So, H_0 is refused and H_a is accepted. There is significant

differences among groups after doing the treatment, with $F_{\text{value}} = 18.216$ and the significant level was lower than alpha (α) ($0.00 \leq 0.05$).

Knowing that there is a significant difference among groups after doing the treatment, writer needs to test the hypotheses. Because ANOVA is only to know that there is significant differences among groups, not to know where the differences among groups are, to answer the research problems and test the hypotheses, writer applied **Post Hoc Test**.

Table 4.10 Post Hoc Test

(I) Subjects	(J) Subjects	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CG speaking score	EG speaking score	-8.359*	1.914	.000	-12.18	-4.54
	CG motivation score	5.737*	1.860	.003	2.03	9.45
	EG motivation score	-.183	1.914	.924	-4.00	3.64
EG speaking score	CG speaking score	8.359*	1.914	.000	4.54	12.18
	CG motivation score	14.096*	1.914	.000	10.28	17.91
	EG motivation score	8.176*	1.966	.000	4.25	12.10

CG	CG speaking score	-5.737*	1.860	.003	-9.45	-2.03
motivatio	EG speaking score	-14.096*	1.914	.000	-17.91	-10.28
n score	EG motivation score	-5.920*	1.914	.003	-9.74	-2.10
EG	CG speaking score	.183	1.914	.924	-3.64	4.00
motivatio	EG speaking score	-8.176*	1.966	.000	-12.10	-4.25
n score	CG motivation score	5.920*	1.914	.003	2.10	9.74

*. The mean difference is significant at the 0.05 level.

The criteria of H_0 is accepted when the significant value is higher than alpha (α) (0.05), and H_0 is refused when the significant value is lower than alpha (α) (0.05).

1. First, based on the calculation above used manual calculation and SPSS 18.0 program of Post Hoc Test, Experiment Group of speaking ability shows the significant value (0.03) was lower than the alpha (0.05). It meant that there is significant effect of speaking score and students' motivation. Thus, H_a that state using cartoon story maker gives significant effect for experimental class in speaking ability at the class of speaking III of the State Islamic institute of Palangka Raya was accepted and H_0 that state using cartoon story maker in speaking ability at the class of speaking III of the State Islamic institute of Palangka Raya is rejected.
2. Second, on the calculation above used manual calculation and SPSS 18.0 program of Post Hoc Test, Experiment Group of students' motivation shows the

significant value (0.03) is lower than the alpha (0.05). It means that there is significant effect of students' motivation. Therefore, H_a that state using cartoon story maker gave significances effect for experiment class in students' motivation at the class of speaking III of the State Islamic institute of Palangka Raya is accepted and H_0 that state using cartoon story maker does not have a statically significant effect on students' motivation at the class of speaking III of the State Islamic institute of Palangka Raya is rejected.

3. Third, on the calculation above used manual calculation and SPSS 18.0 program of Post Hoc Test, Experiment Group of speaking score and students' motivation shows the significant value (0.00) is lower than the alpha (0.05). It means that there is significant effect of using cartoon story maker on students' speaking score and motivation. Therefore, H_a that state using cartoon story maker gives significances effect for experiment class in students' motivation at the class of speaking III of the State Islamic institute of Palangka Raya is accepted and H_0 that state using cartoon story maker does not have a statically significant effect on students' motivation at the class of speaking III of the State Islamic institute of Palangka Raya is rejected.

4. Interpretation of The F-Ratios

Based on the result of the research, writer interpreted that:

1. Teaching using cartoon story maker is more effective on students' speaking ability than teaching speaking without giving the cartoon story maker. It was

shown that the result shows significant value is lower than alpha ($0.00 \leq 0.05$).

2. Teaching using cartoon story maker is more effective on students' motivation than teaching speaking without giving cartoon story maker. It is shown that the result showed significant value is lower than alpha ($0.03 \leq 0.05$).
3. There is no different effect between teaching speaking using cartoon story maker on students' speaking score and motivation. It is based on the calculation used SPSS 18.0 statistic program, the result shows significant value is higher than alpha ($0.924 \geq 0.05$).

C. Discussion

The result of analysis shows that Is significant effect of using cartoon story maker on students speaking ability and motivation at the class of speaking III of the State Islamic institute of Palangka Raya. The students who were taught using cartoon story maker on got higher score in post test with mean (81.41) in speaking test and (73.24) in students' motivation, than those students who taught by using power point presentation and pictures with mean (73.05) in speaking test and (67.32) in students' motivation. Moreover, after the data calculated using ANOVA with 5% level of significant. It is found that the F observed is higher than F table with $\alpha=0.005$.

The first result based on the data analysis, it was shown that teaching using cartoon story maker is more effective on students' speaking ability than teaching

speaking without cartoon story maker. It is shown that the result showed significant value is lower than alpha ($0.00 \text{ lower} \leq 0.05$).

Thus, H_a that stating using cartoon story maker gives significant effect on students' speaking ability of the class of speaking III of the State Islamic institute of Palangka Raya is accepted and H_0 that stating using cartoon story maker did not give significant effect on students' speaking ability of the class of speaking III of the State Islamic institute of Palangka Raya is rejected. It is confirmed the thesis by Andi Widdaya Sofyana from State Institute for Islamic Studies of Salatiga about task based language teaching in improving students' speaking skill trough cartoon story maker (a CAR of the 10th grade students of MAN Temanggung). This research goals to know the implementation of TBLT in improving students' speaking skill through cartoon story maker and to know the students' improvement on speaking skill by implementing Task Based Language Teaching through cartoon story maker. Based on the result of the research, it can be concluded that this research is successful.¹

Second, the result testing hypothesis shown that experiment group of motivation shows the significant value (0.03) is lower than the alpha (0.05). It means that there is significant effect of cartoon story maker on students' motivation. Therefore, H_a state that using cartoon story maker gives significant effect for experiment class on students' motivation of the class of speaking III of the State

¹ Andi Widdaya Sofyana, *Task Based Language Teaching In Improving Students' Speaking Skill Trough Cartoon Story Maker (a car of the 10th grade students of MAN Temanggung)*, Thesis, Salatiga : State institute for Islamic Studies, 2015.

Islamic institute of Palangka Raya is accepted and H_0 that state using cartoon story maker does not have significant effect on students' motivation of the class of speaking III of the State Islamic institute of Palangka Raya is rejected.

Third calculation, on the calculation above used manual calculation and SPSS 18.0 program of Post Hoc Test, experiment group of speaking ability and students' motivation shows the significant value (0.03) is lower than the alpha (0.05). It means that there is significant effect of cartoon story maker on students' speaking score and motivation. Therefore, H_a that state using cartoon story maker give significances effect for experiment class in students' motivation of the class of speaking III of the State Islamic institute of Palangka Raya is accepted and H_0 that state using cartoon story maker does not have statically significant effect on students' motivation of the class of speaking III of the State Islamic institute of Palangka Raya is rejected.

The finding indicated that the alternative hypothesis stating that is any significant effect of using cartoon story maker on students' speaking score and motivation of the class of speaking III of the State Islamic institute of Palangka Raya is accepted. On contrary, the null hypothesis is rejected.

There are several reasons of using cartoon story maker gives effect on students' speaking score and motivation. First, based on teaching learning process, the students understand what they should do first when the writer asked them to speak up on the theme. The finding is suitable with the definition of cartoon story maker cartoon story maker is a simple program that let you rapidly create 2D cartoon stories

with conversations, dialogues, and different backgrounds. Background images can be imported from external sources, such as the Web, unlike the character images (the character cartoons).²

Second, the students can explore many ideas from mind. It's a good way to develop idea before starting speaking activity. The learners can do it on their own or with friends or classmate to try find inspiration or idea. This finding is related to Norma Prayogi from State University of Surabaya about improving students' speaking ability by using cartoon story states that this research is about retelling story by using the media to improve speaking ability. The action was successful when at least 18 students or 70% of 24 students have good level in speaking ability. The presence of this media to improve students' narrative speaking had given a significant progress toward their speaking ability. The students new perspective that they could also relate the material to their hobby like pictures, music, etc.³

Third, the finding was suitable with definition that conversations stories are also included an unlimited number of frames and are view frame by frame. Each frame can include images, text bubbles, and voice recordings. The stories can be saved on a computer as HTML page (web pages), and can easily viewed by others on any computer using a web browser such as internet explorer. Stories can be printed. Completed stories can also be loaded back into cartoon story maker and edited or

² [Http://cartoon-story-maker.software.informer.com/](http://cartoon-story-maker.software.informer.com/) (Accessed : 02 march 2016)

³ Norma Prayogi, *Improving Students' Speaking Ability By Using Cartoon Story*, Thesis, State University of Surabaya, 2013.

added to.⁴ It is confirmed the thesis by Nurawati Mina from STBA LIA Jakarta about designing cartoon story maker as a supplementary material for English structure subject. This research allows teachers and students to know the process and the basic principles of how a cartoon story maker for learning is designed in the context of English Structure class.⁵

Based on calculation of One-Way ANOVA, students' improvement on their speaking score and motivation could be proves from increased students scoring speaking ability and motivation on pre-test to post-test. Therefore, the students could gain their idea and arrange their idea into a performance. It could be conclude that any factors also improve the students speaking score and motivation. Teaching by cartoon story maker improves the students' speaking ability, especially for the fluency, the cartoon story maker helped them to speak fluency and describe something based on the topic. Cartoon story maker also help the students improved their pronunciation, because the cartoon story maker is available to record then sound and they can learn by mistake from sound recording and conversation.

Not only conversations but also stories that include an unlimited number of frames and are view frame by frame. Each frame can include images, text bubbles, and voice recordings. The stories can be saved on a computer as HTML page (web pages), and can easily viewed by others on any computer using a web browser such

⁴ [Http://cartoon-story-maker.software.informer.com/](http://cartoon-story-maker.software.informer.com/) (Accessed : 02 march 2016)

⁵ Mina, Nurawati, *Designing cartoon Story Maker as a Supplementary Material for English Structure Subject*, Research: Jakarta, STBA LIA, 2015.

as internet explorer. Stories can be printed. Completed stories can also be loaded back into cartoon story maker and edited or added to. Furthermore by using this application the writer tries to help students to comprehend conversations and then practice it easily.

