CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

This chapter presents research finding which has been collected during research and discussion about the data of the research.

A. Research Findings

The purpose of this research is to know whether there is or not any significant difference in students' achievement between students who are taught by using Time Token Arends Strategy and those who are taught without Time Token Arends Strategy in speaking ability. This research used quasi experimental designed which consists of two groups (control group and experimental group). The data in this research obtained from the score of pre-test and post-test of both the control group and experimental group.

As mentioned before, the researcher used test as the instrument in collecting data. It was given to eleventh grade students of MA Ma'arif NU, more precisely in class XI F IPA as control group which consist of 17 students and class XI G IPA as experimental group which consist of 32 students.

The test in form of speaking test. The test was given by asking the students to deliver their opinion based on topic in front of their friends. The researcher served 6 topics and each students should choose one topic. This test was to know the significant difference in students' achievement between students who are taught by using Time Token Arends Strategy and those who are taught without Time Token Arends Strategy in speaking ability. The researcher used the scoring

rubric to give score the students' speaking. The components on the scoring which are used in this test are grammar, vocabulary, content of ideas, fluency, and pronounciation. To know the students' achievement that is good or not, the researcher devided the score in some categorizations as follow:

Tabel 4.1
The Score's Categorization of
the Student's Speaking ability

No.	Intervals	Categorization
1	90-100	Excellent
2	80-89	Very Good
3	70-79	Good
4	60-69	Sufficient
5	50-59	Average
6	40-49	Poor
7	30-39	Very Poor

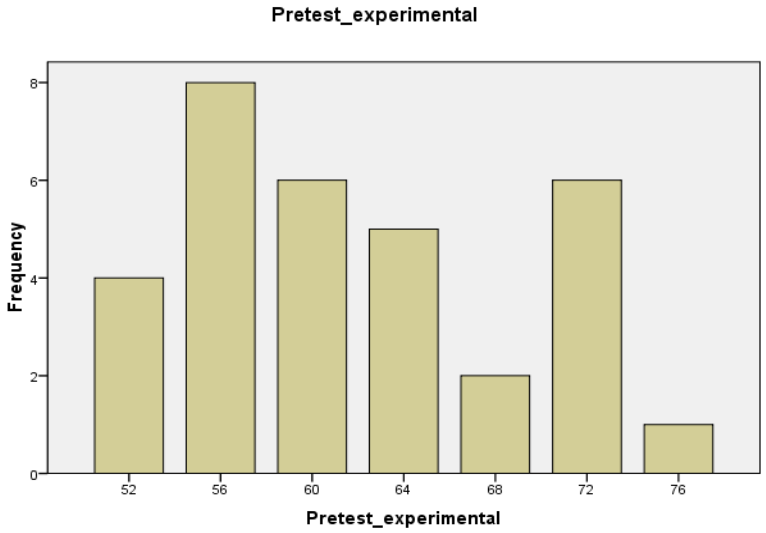
The results of the research were explained as follows.

1. The Computation Result of Pre-test and Post-test in Experimental Group

a. Analyzing pre-test of experimental class

Experimental group was a class which had given a treatment in student speaking ability by using Time Token Arends Strategy. Before the researcher gave the treatment, the researcher would present students speaking ability score which got from students pre-test. The researcher conducted students' pretest score in experimental group on Tuesday 17th July 2018 at 13.00-14.20. The experimental group conducted in XI G IPA which consists of 32 students. The researcher presents pre-test score in bar chart below:

Chart 4.1



Students' pre-test score in experimental group

Based on the chart above, the researcher know that 4 students got score 52, there were 8 students got score 56, 6 students got score 60, 5 students got score 64, only 2 students got score 68, there were 6 students got 72, and only 1 student got score 76. Based on the result of Speaking ability pre-test, categorization of students' pre-test scores was given in following table :

Tabel 4.2
Categorization of Students' Pre-test Score

No.	Intervals	Frequency (f)	Percentages (p) %	Categorization
1	90-100	0	0	Excellent
2	80-89	0	0	Very good
3	70-79	7	22.00	Good
4	60-69	13	41.00	Sufficient
5	50-59	12	37.00	Average
6	40-49	0	0	Poor

7	30-39	0	0	Very Poor
		∑f = 32	∑p = 100 %	

Based on the table of categorizations above, it can be seen that in pretest, there were 12 students (37%) got the score 50 – 59 that categorized in average categorization. Then, there were 13 students (41%) got the score 60 – 89 that categorized in sufficient categorization and there were 7 students (22%) got the score 70 – 79 that categorized in good categorization. Meanwhile, there was no students in poor, very poor or very good and excellent categorization. It means that the students' speaking ability in experimental class was in sufficient and average categorization.

Table 4.3
Statistic Data of Students' Pre-test Score in Experimental Group

Statistics

pretest_experimental

N	Valid	32
	Missing	0
Mean		61.88
Median		60.00
Mode		56
Std. Deviation		7.183
Sum		1980

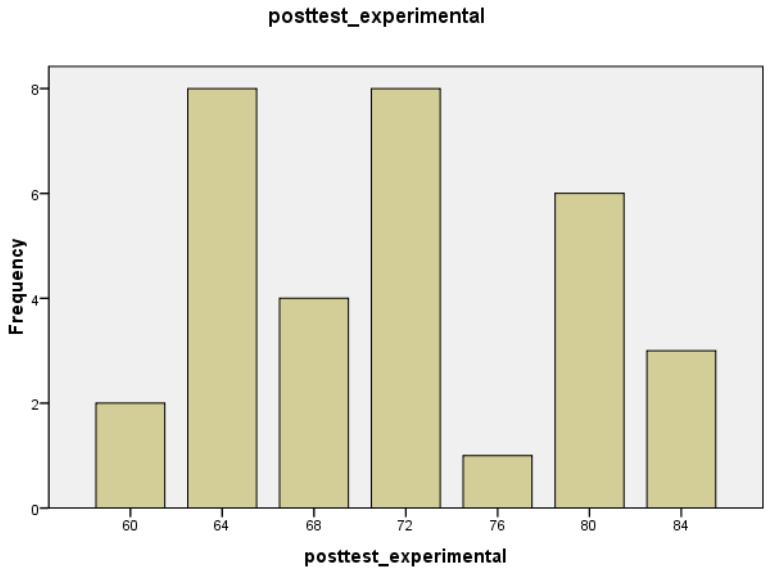
Based on table 4.3 above, it can bee seen that the test takers consisted of 32 students it shown that mean sore 61.88, it is mean that the average of 32 students got 61.88. based on score categorization 61.88 was categorized in sufficient score. The median score was 60.00 and the mode was 56. The mode is score which has the highest frequency, it means that

the most frequent score was 56 indicated that many students got average score (under sufficient) in experimental group before getting treatment.

b. Analyzing post-test of experimental class

Conducting a post-test for experimental group was to know the student's speaking ability after they got treatment by using Time Token Arends Strategy. Post-test was conducted on Friday 4 July 2018 at 07.00-08.20. Based on post-test, the researcher presented students result in bar chart as follow:

Chart 4.2
Students' Post-test Score in Experimental group



Based on the chart above, it can be seen that there were 2 students got score 60, 8 students got score 64, 4 students got score 68, 8 students got score 72, 1 students got score 76, there were 6 students got score 80, and 3 student got score 76. Based on the result of Speaking ability post-test,

categorization of students' post-test scores was presented in following table :

Tabel 4.4
Categorization of Students' Post-test Score

No.	Intervals	Frequency (f)	Percentages (p) %	Categorization
1	90-100	0	0	Excellent
2	80-89	9	28.00	Very good
3	70-79	9	28.00	Good
4	60-69	14	44.00	Sufficient
5	50-59	0	0	Average
6	40-49	0	0	Poor
7	30-39	0	0	Very Poor
		∑f = 32	∑p = 100 %	

Based on the table of categorizations above, it can be seen that in post-test, there were 14 students (44%) got the score 60 – 69 that categorized in sufficient categorization. Then, there were 9 students (28%) got the score 70 – 79 that categorized in good categorization and there were 9 students (28%) got the score 80 – 89 that categorized in very good categorization. Meanwhile, there was no students got score under sufficient. It means that the students' speaking ability in experimental class after getting treatment was better than before getting treatment.

Then, the post-test scores of experimental group were presented using distribution frequency in the following table:

Table 4.5
Statistic Data of Students' Post-test Score in Experimental Group

Statistics

posttest_experimental

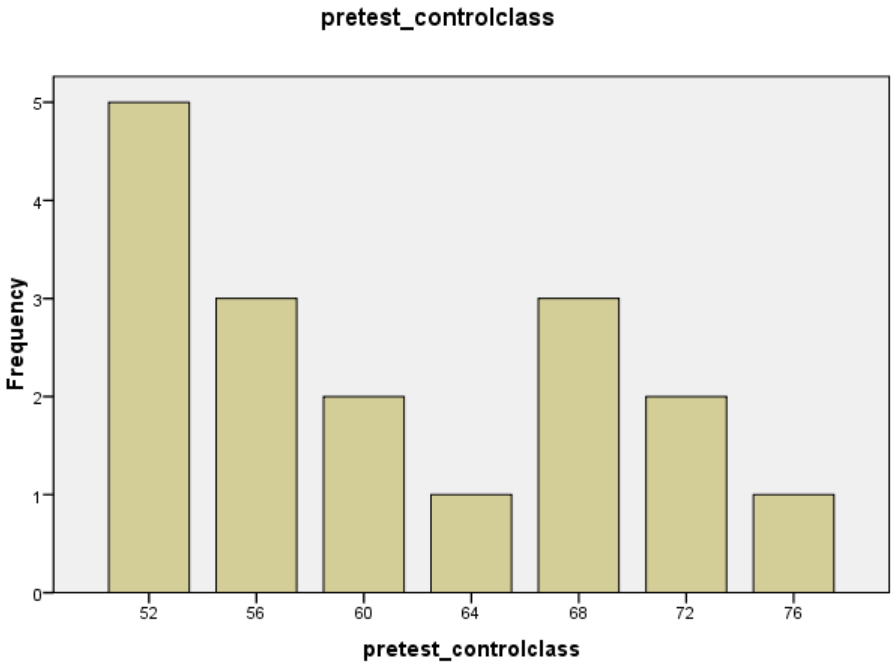
N	Valid	32
	Missing	0
Mean		71.50
Median		72.00
Mode		64
Std. Deviation		7.379
Sum		2288

Based on table 4.3 above, it can bee seen that the test takers consist of 32 students it shown that mean sore 71.50, it is mean that the average of post-test score in experimental group 71.50. Based on score categorization 71.50 was categorized in good score. The median score was 72.00 and the mode was 64. In experimental group the mean score of pre-test was 61.88. It was categorized in sufficient categorization while the mean score of post-test was 71.50 and it was categorized in good categorization. So, it can be concluded that there was signifficant different score between pre-test and post-test in control group.

2. The Computation Result of Pre-test and Post-test in Control Group

a. Analyzing Pre-test of Control Group

Control group was a class that taught without using Time Token Arends Strategy. The result from Control group would be compared with experimental group which was given treatment using Time Token Arends



Strategy to know the differences score between both of them. The researcher administered pre-test in control class or XI F IPA on Monday 16th July 2018 at 07.00-08.20. The result of pre-test score was presented in bar chart below:

Chart 4.3
Students' Pre-test Score in Control group

Based on the chart above, the researcher know that 5 students got score 52, there were 3 students got score 56, 2 students got score 60, 1 students got score 64, 3 students got score 68, there were 2 students got 72,

and only 1 student got score 76. Based on the result of Speaking ability pre-test, categorization of students' pre-test scores was given in following table :

Tabel 4.6
Categorization of Students' Pre-test Score

No.	Intervals	Frequency (f)	Percentages (p) %	Categorization
1	90-100	0	0	Excellent
2	80-89	0	0	Very good
3	70-79	3	18.00	Good
4	60-69	6	35.00	Sufficient
5	50-59	8	47.00	Average
6	40-49	0	0	Poor
7	30-39	0	0	Very Poor
		∑f = 17	∑p = 100 %	

Based on the table of categorizations above, it can be seen that in pre-test, there were 8 students (47%) got the score 50 – 59 that categorized in average categorization. Then, there were 6 students (35%) got the score 60 – 69 that categorized in sufficient categorization and there were 3 students (18%) got the score 70 – 79 that categorized in good categorization. in control class, the most of sudents got average score. It means that the students' speaking ability in control class was under sufficient.

Then, the researcher presented the descriptive analysis of pre-test score in following table :

Table 4.7
Statistic Data of Students' Pre-test Score in Control Group

Statistics

pretest_control

N	Valid	17
	Missing	0
Mean		60.94
Median		60.00
Mode		52
Sum		1036

Based on table 4.3 above, it can bee seen that the test takers consisted of 17 students. It shown that mean score 60.94, it is mean that the average of 17 students got 61.88. based on score categorization 61.88 was categorized in sufficient score. The median score was 60.00 and the mode was 52. The mode is score which has the highest frequency, it means that the most frequent score was 56 indicated that many students got average score (under sufficient) in pre-test of control group.

b. Analyzing Post-test of Control Group

Administering a post-test for control group was done to know the improvement of student's speaking ability without using Time Token Arends Strategy. The researcher gave post-test in control class or XI F IPA

on Monday, 30 July 2018 at 07.00-08.20Based on post-test, researcher presents students result in bar chart as follow:

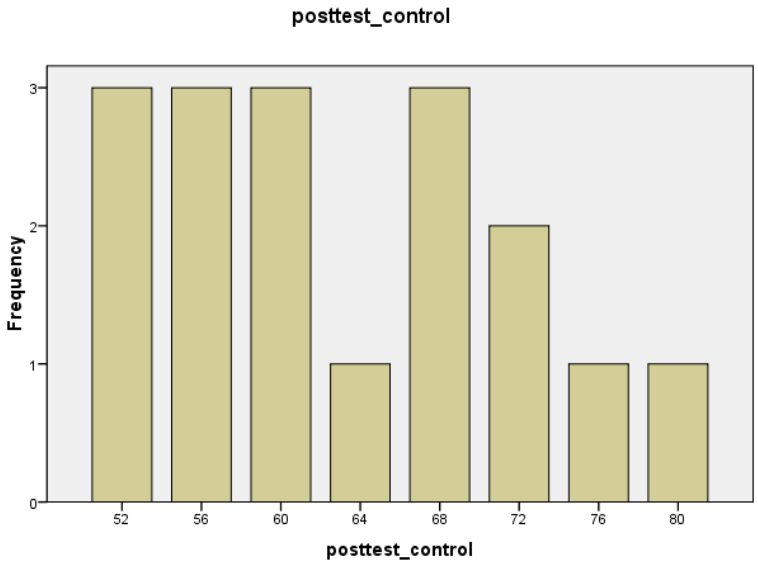


Chart 4.4
Students' Post-test Score in Control group

Based on the chart above, it can be seen that there were 3 students got score 52, 3 students got score 56, 3 students got score 60, 1 student got score 64, 3 students got score 68, there were 2 students got score 72, 1 student got score 76, and 1 student got score 80. Based on the result of Speaking ability post-test, categorization of students' post-test scores was presented in following table :

Table 4.8
Categorization of Students' Post-test Score

No.	Intervals	Frequency (f)	Percentages (p) %	Categorization
1	90-100	0	0	Excellent
2	80-89	0	0	Very good
3	70-79	4	24.00	Good
4	60-69	7	41.00	Sufficient
5	50-59	6	35.00	Average
6	40-49	0	0	Poor
7	30-39	0	0	Very Poor
		∑f = 17	∑p = 100 %	

Based on the table of categorizations above, it can be seen that in post-test, there were 6 students (35%) got the score 50 – 59 that categorized in average categorization. Then, there were 7 students (41%) got the score 60 – 69 that categorized in sufficient categorization and there were 4 students (24%) got the score 70 – 79 that categorized in good categorization.

In the result of post test from control group, most of students' score was in sufficient and average categorization. It means that the student's speaking ability in control group still low. Then, the pre-test scores of control group were presented using distribution frequency in the following table:

Table 4.9
Statistic Data of Students' Post-test Score in Control Group

Statistics

posttest_control

N	Valid	17
	Missing	15
Mean		63.06
Median		60.00
Mode		52[a]
Std. Deviation		8.778
Sum		1072

Based on table 4.3 above, it can bee seen that the mean score was 63.06, it means that the average of 17 students got 63.06. Based on score categorization 63.06 was categorized in sufficient score. The median score was 60.00 and the mode was 52. The mode is score which has the highest frequency, it means that the most frequent score was 52 indicated that many students got average score (under sufficient) in post-test of control group. In control group the mean score of pre-test was 60.94 and the mean score of post-test was 63.06. Both of pre-test and post-test score were categorized in sufficient categorization. So, it can be concluded that there was no signifficant different score between pre-test and post-test in control group.

B. Hypothesis Testing

The hypothesis of this study as follows :

1. H_0 (Null Hypothesis) states that there is not any significant difference in students' speaking ability for eleventh grade of MA Ma'arif NU Blitar between students who are taught by using Time Token Arends Strategy and those not taught without using Time Token Arends Strategy.
2. Ha (Alternatif Hypothesis) states that there is any significant difference in students' speaking ability for eleventh grade of MA Ma'arif NU Blitar between students who are taught by using Time Token Arends Strategy and those not taught without using Time Token Arends Strategy.

This research used standard significance 95% ($\alpha = 0.05$) to test the hypothesis. The interpretations to test the hypothesis are stated as follow:

1. When the significant value is less than 0.05, the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. It means that there is significant effect of using Time Token Arends Strategy on students' speaking ability.
2. When the significant value is more than 0.05, the null hypothesis (Ho) is accepted and alternative hypothesis (Ha) is rejected. It means that significant effect of using Time Token Arends Strategy on students' speaking ability.

Then, because of the research consisted of two samples (experimental and control group), so the researcher needed to test the f-test in order to see the variance that the both groups were equal. The hypothesis for the f-Test can be seen below:

3. Ho: both variances are the same or equal (experimental and control group)
4. Ha: both variances are different or not equal (experimental and control group)

This research used standard significance 95% ($\alpha = 0.05$) to test the hypothesis. The interpretations to test the hypothesis are stated as follow:

a. If the significance value > 0.050, then the null hypothesis is not rejected. So, *equal variance assumed* is used. In conclusion, the variance of experimental group and the variance in control group is equal.
b. If the significance value < 0.050, then the null hypothesis is rejected. So, *equal variance not assumed* is used. In conclusion, the variance of experimental group and the variance in control group is not equal.

To analyze the data, the researcher used SPSS.16.0 version. The result can be seen below :

Table 4.10
The Result of Group Statistic T-test

Group Statistics

	class	N	Mean	Std. Deviation	Std. Error Mean
score	control class	17	63.06	8.778	2.129

	experimental class	32	71.50	7.379	1.304

Based on table 4.10 (group statistic) above, it showed that there were two class, they were control class and experimental class. Then, at N cell showed that it was the number of students in control class and experimental class. In control class there were 17 students with the mean score 63.06, standard deviation 8.778 and standard error 2.129. While, in experimental class there were 32 students with the mean score 71.50, standard deviation 7.379 and standard error 1.304.

From the result of mean score of both control class and experimental class above, the mean of students' score in experimental class is higher than the mean of students' score in control class. So it can be concluded that the students' score in experimental class is better than students' score in control class.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
score	Equal variances Assumed	1.307	.259	-3.568	47	.001	-8.441	2.366	-13.201	-3.681

	Equal variances not assumed			-3.381	28.215	.002	-8.441	2.497	-13.554	-3.328

In this research, the researcher using F test (Levene's test) to know the result of homogenity testing. From that result, it would be known wether to use "Equal Variances Assumed (if variance is same)" or "use Equal Variances not Assumed" (if variance is different) in *t-test*.

Based on table 4.11 above, it can be seen that the significant p value of F test is 0.259. It's bigger than 0.05. It means that the null hypothesis is not rejected. So, based on the result of the F test, the test with equal variances assumed is used.

Then, from the results of the computation of the independent t test as presented in table 4.11 above shows that the significant value of the t (2-tailed) was 0.001. It was lower than significant 0.005 (0.001 < 0.005). it means that the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. In other words, it can be concluded that there is signifficant different score between students taught by using Time Token Arends Strategy and those taught without using Time Token Arends Strategy in speaking ability.

C. Discussion

This research is about the use of Time Token Arends Strategy in teaching speaking of the eleventh grade at MA Ma'arif NU Blitar. This section is

intended to analyze the result of research finding based on the related theory. All data collected from the research instrument provides information of the research finding. The result of the students' score is calculated by using t-test.

The researcher conducted the research in five meetings for each group. In the first meeting, pretest was administered in both of the experimental and control group. The purpose of conducting pretest was to know the students' score before the treatment. Beside that, pretest was conducted to ensure that both of experimental and control group have similarity of speaking skill. The second until fourth meeting, the researcher gave the treatment. The treatment was teaching using Time Token Arends Strategy in the experimental group. Meanwhile, the control group was taught by using conventional teaching. The treatment was given in three meetings for each group. In the last meeting, the students were given posttest after they got the treatment. It was conducted to measure the effectiveness of Time Token Arends Strategy after getting the treatment. To scoring, the researcher used scoring rubric. Aspect of assessment in this research include of grammar, vocabulary, content of idea, fluency, and pronunciation.

The researcher assumed that there was a significant difference on students' speaking ability between the experimental and the control groups after they got the treatment. It was also anticipated that Time Token Arends Strategy was effective in teaching speaking. To prove this assumption, the researcher did hypothesis testing. The hypothesis was tested by using the *t*-

test statistical analysis by applying Statistical Package for the Social Science (SPSS) 16.0.

Because of there were two samples (control group and experimental group) in this research, the researcher used *independent sample t-test* to test the hypothesis. To analyze using *independent sample t-test*, the data must be normal and homogeneous. So, before applying the *t*-test statistical analysis, an analysis to find out the normality and the homogeneity of the two samples were performed.

Based on the result of the analysis which presented in previous chapter, it was known that in control group, the significant value of pre-test was 0.541 and in post-test was 0,739. Both of significant value in pre-test and post-test in control class was higher than 0.05. It means that the pre-test and post-test control group were normally distribution. While, in experimental group the significant value of pre-test was 0.325 and in post-test was 0,382. Both of significant value in pre-test and post-test in experimental group were higher than 0.05. so, it can be concluded that both data results in control group and experimental group were normally distributed.

Then, the researcher also checked the homogeneity of data from experimental and control group by using the tests of homogeneity of variances. The output data of homogeneity get from post-test of experimental and control group. The data was homogeneous because the significant coefficient was 0.259 and it was higher than the significant 5%.

Because of data in the experimental and the control groups was concluded to be normally distributed and homogeneous, so the researcher continued the statistical analysis by using the *t*-test more precisely using independent sample t-test. It was applied to find out whether or there was any significant difference or not in the students' speaking ability between the experimental and the control groups. The output of the *t*-test statistical analysis on the table 4.10 performed the mean of the control group group was 63.06 and the mean of the experimental group was 71.56. The mean of the experimental group was higher than the mean of the control group and based on table 4.11 above showed that the significant (2-tailed) coefficient was 0.001 with the degree of freedom was 47. Because the significant (2-tailed) coefficient was lower than the significant coefficient 5% (0.05), the null hypothesis (there was no significant difference in the students' speaking ability between the experimental and the control groups) was rejected. On the contrary, the alternative hypothesis (there was a significant difference in the students' speaking ability between the experimental and the control groups) was accepted. The result of the *t*-test statistical analysis proved that there was a significant difference in the students' speaking ability between the experimental and the control groups after they got the treatment. It indicates that Time Token Arends Strategy is effective to teaching speaking.

The previous researchers also had proved that Time Token Arends Strategy can be effective and improve the students' speaking ability. It is supported by some previous studies done related to the implementation of

Time Token Arends Strategy in teaching speaking. A study conducted by Retno ventary and Syaifudin Latif (2016) at SMPN 01 Batanghari. Its experimental study which the finding showed that the students' score of using Time Token Arend method is high. It means that the Time Token Arends Strategy give positive influence toward students' speaking ability. Other study conducted by Aida Safitri. The study was about the effectiveness of Time Tokan Arend Strategy to teach speaking in hortatory exposition. The result of this reseach showed that Time Token Arends Strategy can improve the students speaking ability especially in teaching hortatory exposition. The next research conducted by Ismiatul Faidah (2016). It was about the implementation of Time Token Arends Method to improve the students' speaking skills of tenth grade students of SMK Saraswati Salatiga. The finding of this research showed that using Time Token Arends increase students' speaking skill.

From the explanation above, it can be said that Time Token Arends Strategy could become the appropriate strategy for teaching speaking. In this study, the researcher focused on the use of Time Token Arends Strategy to improve the students' speaking ability. Arends in Slavin (2001:15) stated that time token one of type in co-operative study which can be used to teach the social skill, to avoid the student predominate the discussion or student kept quiet at all. Where student learn in small group consisted of four until six people and discuss about the material which must be learned. Each student given the coupon talk with the time + 30 second. Every student get score

according to circumstance time. When they have spoken the coupon given to the teacher. Every student conversing one coupon. Student which have used up its coupon may not speak again. What still hold the coupon have to speak until its coupon used up.

Time Token Arends Strategy can help students to improve students speaking skills. This is because with this strategy students are required to participate during the learning process, thus inevitably students must participate to express their ideas. This strategy also provides equal opportunities for each student to actively participate in learning activities, thus there will be no dominating students or vice versa no students who are just silent do not participate during the learning process takes place. It is suitable with Istarani's explanations (2011: 194) he defined that Time Token technique is a structure that can be used to teach social skills, to avoid the students silence during class activities. It is also line with Arends (2009: 384) who said that Time Token Arend can be applaid in situation where there are some people dominate the conversation and some other are shay and never say anything.

In the Time Token Arends Strategy the teacher act as facilitators and students as subjects of learning. With this strategy students are required to be able to cooperate with each other and discuss in order to express their ideas or ideas. This makes students more enthusiastic in following the learning process. The implementation of Time Token Arends Strategy in this study showed that the students involved in the discussion well. It appears that Time

Token Arends Strategy stimulates the students' active participation. They seemed more enthusiastic and confidence in convey their opinion.

From the explanation above, it can be said that Time Token Arends Strategy could become the appropriate strategy for teaching speaking Senior High School. It can help students to improve speaking ability, so this research can be concluded that Time Token Arends Strategy was effective to teaching speaking of eleventh grade at MA Ma'arif NU Blitar.