CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents about research findings, hypothesis testing and the discussion based on the results of the study.

A. Research Finding

In this research, the researcher presents the students' speaking achievement before and after being taught by using Socratic method. To know the speaking achievement the researcher conducted pre-test and post-test. As mentioned before, the reseacrher used test as instrument in collecting the data. It was given to the tenth grade students of SMK NU Tulungagung. Pre-test and post-test were done to get speaking score of the students, the students' scores in pre-test and post-test are presented in the following table:

Table 4.1

The Result Of Pre-Test And Post-Test Students' Speaking Skill Before And After Being Taught By Using Socratic Method

No	Name	Pre-test Score	Post-Test Score
1.	ADA	62	67
2.	AYW	64	70
3.	AW	62	66
4.	AI	64	70
5.	AS	58	62
6.	AL	60	67
7.	BL	69	75
8.	CAA	59	65

9.	DKS	55	62
10.	DA	55	67
11.	EMD	50	58
12.	IC	64	70
13.	IPS	62	70
14.	IP	64	70
15.	KS	60	67
16.	LP	60	67
17.	LA	60	67
18.	LD	60	65
19.	MA	56	65
20.	MAP	55	62
21.	MFA	63	65
22.	NMS	62	70
23.	NSA	64	70
24.	RA	62	65
25.	RM	55	63
26.	RK	56	63
27.	RKH	56	65
28.	SC	56	66
29.	SK	56	65
30	WKS	60	67
31.	YY	62	70

Sources: Data analyzed SPSS 16, 2018.

Based on the data above, there were 31 students as the sample of the research. The test was conducted by the researcher before and after being taught by using Socratic method in teaching speaking. The test focused on delivering students speaking orally. Each students was given 5 minutes to make an opinion about something topic.

1. **Computation result of the students' score before being taught by using Socratic method**

   The pre-test asked to the students to make an opinion about their class condition. There were 31 students as the sample of the study. The test was intended to know the students speaking skill before students given the treatment. Here, each students was given 5 minutes to prepare before delivering their opinion. The researcher call them one by one to come in front of the class. While the students delivering their opinion, the researcher assess their score by using scoring rubric of speaking. The data of the students' speaking achievement before being taught by using Socratic method can be seen in Appendix 3. The researcher used the descriptive statistic to describe the data score from students. Descriptive statistic are statistics that describe the activity of collection, compilation, processing and presentation of data in the form of charts and graphic that provide an overview of the circumstances or evens clearly and concisely. The descriptive statistic of pre-test scores consisted of mean (table 4.2) and the frequency distribution of pre-test (table 4.3), can be seen below:

Table 4.2. Descriptive Statistic of Pre-Test Score

	N	Minimum	Maximum	Mean	Std. Deviation
Pre_Test	31	50	69	59,71	3,985
Valid N (listwise)	31				

Based on the table above, we can know the students speaking score in pre-test when they got the test before the researcher gave the treatment. The sample consisted of 31 students. It shows that the mean score is 59.71. The minimum score 50.00 and the maximum score is 69.00

Table 4.3. Frequency Distribution of Pre-Test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	3,2	3,2	3,2
	55	4	12,9	12,9	16,1
	56	5	16,1	16,1	32,3
	58	1	3,2	3,2	35,5
	59	1	3,2	3,2	38,7
	60	6	19,4	19,4	58,1
	62	6	19,4	19,4	77,4
	63	1	3,2	3,2	80,6
	64	5	16,1	16,1	96,8
	69	1	3,2	3,2	100,0
	Total	31	100,0	100,0	

Sources: Data analyzed SPSS 16, 2018.

The frequency of pre-test after being distributed from the table above can described as:

a) There are 11 students (35.5%) get score between 50-58, it means that the students' speaking achievement is need improvement.

b) There are 20 students (64.5%) get score between 59-69, it means that the students speaking achievement is average.

2. **Computation Result of The Students' Score After being Taught By Using Socratic Method**

In this section, the researcher presents the result after being given the treatment by using Socratic method, the students are given a post-test. In the post-test section, there were 31 students as the test takers of the study. In the post-test section, the test almost same with the pre-test section but little bit different level. The researcher asks the students to practice their speaking ability with the instruction they must make an opinion about full day school one by one in front of the class. This tests

intendeed to know the students' speaking achievement after being taught by using Socratic method. The data from the post-test can be seen in Appendix 4. The descriptive statistic of post-test which consist of mean (Table 4.4) and the frequency distribution of post-test (table (4.5) can be seen below:

Table 4.4. Descriptive Statistic of Post-Test score

	N	Minimum	Maximum	Mean	Std. Deviation
Post_Test	31	58	75	66,48	3,395
Valid N (listwise)	31				

Sources: Data analyzed SPSS 16, 2018.

Table 4.5. Frequency Distribution of Post-Test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	58	1	3,2	3,2	3,2
	62	3	9,7	9,7	12,9
	63	2	6,5	6,5	19,4
	65	7	22,6	22,6	41,9
	66	2	6,5	6,5	48,4
	67	7	22,6	22,6	71,0
	70	8	25,8	25,8	96,8
	75	1	3,2	3,2	100,0
	Total	31	100,0	100,0	

Sources: Data analyzed SPSS 16, 2018.

The table above is describing about students' score in posttest when they got the test after the researcher gave them the treatment. Based on the table, it shows that the mean score of the students are 66.48. The minimum score is 58.00. The maximum score is 75.00. The frequency of post test score after being distributed are:

1) There are 1 student (3.2%) get score 58, means that the students still need improvement

2) There are 21 students' are get score between 62-67 (67.8%), it means that the students' speaking achievement are average

3) There are 9 students' are get score between 70-75 (29%), it means that the students' speaking achievement are good.

From the results of the data computation above, there are differences on the students' speaking achievement before and after being taught by using Socratic method. The data show that the students' score after being taught by using Socratic method is higher than before being taught by using Socratic method.

3. **The Effect of Using Socratic Method Toward Students' Speaking Achievement**

The researcher used statistical with paired sample analysis by using SPSS 16.00 to ensure the effect of using Socratic method toward students speaking achievemenet. The result is as follows:

Table 4.6. Paired Sample Test

		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Pre_Test - Post_Test	-6,77419	2,02829	,36429	-7,51818	-6,03021	-18,595	30	.000

Sources: Data analyzed SPSS 16, 2018

Based on the table (4.6), output paired sample statistics shows that the mean of pre-test and post-test is (-6.77419) and the standard deviation

is (2.02829), with the mean standard error is (0.36429). The lower differences is (7.51818), while upper difference = (6.03021). The result of t_{score} is (18.595) with df = 30 with the significance of 0.00.

B. Hypothesis Testing

Referring to Table 4.6, we can see that the hypothesis testing of this study are as follows:

1. When the significant value < significant level, the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. It means that there is significant influence of using Socratic method toward the tenth grade students' speaking achievement at SMK NU Tulungagung. It also means that there is different score to the students before and after being taught by using Socratic method. So, the Socratic method is accepted and effective for teaching speaking.

2. When the significant value > significant level, the alternative hypothesis (Ha) is rejected and the null hypothesis (Ho) is accepted. It means that there is no significant influence of using Socratic method toward students speaking achievement to the tenth grade students' before and after being taught by using Socratic method.

The mean score before being taught by using Socratic method is (59.71) and after being taught by using Socratic method is (66.48), it means that the mean before being taught by using Socratic method is lower than after being taught by using Socratic method. Meanwhile, based on the statistical calculation using SPSS 16.00, the researcher gave interpretation to significant value. The significant value of the

research is 0.000, significance level 0.05 and the t_{table} 2.042 the df:30 whereas t_{score} 18.595. Because significant level (0.000) is smaller than significant level, (0.05), it can be concluded that the alternative hyphothesis (Ha) saying that "the alternative hyphothesis can be accepted because there is no error in teaching method, and it can be said that the teaching method effective in teaching and learning. And it can be said that there is different score to the tenth graders of SMK NU Tulungagung between before and after given treatment by using Socratic method.

Therefore there are differences of data presentation between before and after being taught by using Socratic method. The data presents that the score after being taught by using Socratic method is higher than before taught by using Socratic method.

C. Discussion

Based on the result of data analysis, using Socratic method can improves their participate in speaking activity. Another effect is those teaching or method which is prominent in teaching speaking is in students thinking skill, social skill and communication skill were develop. From the previous study, the student can developed their skill from their activity. In the socratic method the students develop their speaking skill come from their critical thinking to make an opion by delivering some row questions from the teacher. This statement strenghtened According to the Carleton University that Socratic questiong helps students to think critically by focusing explicitly on the process of thinking. Thinking skill is mental

processes used to do things like solve problems, make decision, ask question, construct plans, etc. So, from those method can be seen in from the improvement of their partcipation in the class, knowledge of language component, students thinking skill, social skill, and communication skill. The thinking skill can improves their speaking if the students is getting knownledge building. Knowledge building refers to the process of creating new cognitive artifacts as a results of common goals, grup discussions and synthesis of ideas. These pursuits should advance the students current understanding of individuals within group, at a level beyond their initial knowledge level.

The objectives of this research is to know the effect of using Socratic method in students' speaking achievement to the tenth grade at SMK NU Tulungagung in academic year 2017/2018. In order to achieve the objectives of the research with one-group pre-test post-test design. The research procedures was done during the teaching and learning process. In this study, it was indicated that the result of post-test was better than the pre-test. It means that the score of post-test were significantly better than the score pre-test at the end of the study.

Based on the research finding, it showed that the mean scores is significant different between pretest that the mean score of students before they were taught was 59.71. Besides, the mean score of the students after being taught by using Socratic method was 66.48. It means that the result of posttest score is higher than the result of pretest score or it is known that t_{score} is bigger than t_{table} (18.595> 2.042). Furthermore, there is different

speaking score of the tenth grade at SMK NU Tulungagung before and after being taught by using Socratic method.

Before the students were taught by using Socratic method, they looked shy, passive in class activity also often worried to make mistakes when they spoke English. In the treatment section, the researcher helped them to make better their pronunciation in a difficult words. The students practiced pronunciation by listening to the sound. They also reminded the students to be aware of their pronunciation. She told that in the previous activities they had some mispronunciation, especially when they were make asking and giving opinion. Therefore, the students had to be aware of the pronunciation so that it could improve their speaking performances. During this activities, the researcher took some notes when the students had some mistakes in their speaking performances. When the students were practicing some expressions, the researcher did not interrupt them to give feedback or correction. She also gave more chance to the students to correct their own and their friends' mistakes. When the students were doing their interview or debates, the researcher moved around to monitor them. Then, she made some notes when the students had mistakes so that she could tell all students and gave correction in the end of the lesson.

First, before the implementation of this activities, the researcher found that there was an existing problem related to the students' pronunciation. The students' pronunciation had improved, but they sometimes had some mispronunciation, for example, when they were practicing or making the conversation using the expressions they had

learnt. During the implementation of this activities the researceher gave the students chance to give correction when they or their friends had mispronunciation. This reminded the students that they had mispronunciation, so they became more aware of their pronunciation. This helped them get more accurate pronunciation. By interviewing and observe their speaking, the researcher know their improves. The improvement of the pronunciation score also proves that the students' pronunciation improved. The result of the student score in pronunciation present below:

Table 4.7. Students Score in Pronunciation

Skill	Pre-Test	Post-Test
Pronunciation	19.09	22.96

From the tables above, it found that Socratic method could improve the students' pronunciation. It implies that it is important to give activities which improve the students' pronunciation, such as giving students the model of pronunciation which in the spoken form, so the students can listen directly and attempt to have accurate pronunciation. It is also useful to give the students chance to correct their own and friends' mispronunciation to make them more aware of their pronunciation.

Second, the use of classroom English also successfully made the students more better in speaking. During this activities the researceher reduced the use of Indonesian language and the Indonesian translation in the teaching and learning process. The use of classroom English also made the students give their responds in English as well. The use of Socratic

method helped the students improved their fluency. The could speak fluidly and automatically. The other proof which shows that the students spoke more fluently is the improvement of the students' fluency score in the post-test. The result of the student score in fluency present below:

Table 4.8. Students Score in Fluency

Skill	Pre-Test	Post-Test
Fluency	17.54	18.83

The table above shows that the Socratic method could improve the students' fluency implies that it is important to give the students activities which can improve their fluency, as it is one of criteria of good speaking skills. It is also important to letting the students speaking without interrupting even giving them direct feedback, because it will disturb them to speak fluently.

Third, during the implementation of this activities the students had found some new vocabularies at the presentation stage and the practice stage. The students were given the materials and the practices in different activitiess. This help the students got more vocabularies. The improvement of the students' vocabularies is also proved by the improvement of the students' score of vocabulary. The result of the student score in vocabulary present below:

Table 4.9. Students Score in Vocabulary

Skill	Pre-Test	Post-Test
Vocabulary	15.12	15.51

It is found that Socratic method could improve the students' vocabulary. Therefore, it is important to provide activities or texts in different topics in which the students can gather new vocabularies

Fourth, before the implementation of this activities, the students' use of grammar improved, but there was an existing problem. The problem was that the students still had grammatical mistakes, when they were speaking. Therefore, in this activities, the students were allowed and encouraged to correct their own or their friend's mistakes. During the implementation of this activities, the students were more aware that they had mistakes when they were speaking. This helped the students to speak more accurately. This also minimized grammatical mistakes. The improvement of the students' score of grammar also proved that the students spoke more accurately and minimized the grammatical mistake. The result of the student score in grammar present below:

Table 4.10. Students Score in Grammar

Skill	Pre-Test	Post-Test
Grammar	8.96	9.97

After the students were taught by using Socratic method, the researcher found that the students became more confident to speak English. They became accustomed to do the speaking activities, especially when they were expressing asking and giving opinion by using Socratic method. The students were not reluctant to speak. There was not any students who did not want to speak. In this activities Socratic method successfully improved their confidence to speak. The use of Socratic

method in speaking activities also successfully made the students more active to speak. When the students started their class activity, the class always became noisy, because all students spoke actively and lively. They did not need to be asked to speak up. The method automatically made the students spoke more actively. Here are successfully in the learning speaking by using Socratic method.

From the explanation above, it can conclude that the students were attracted by the lesson, , so they joined the lesson very well and took more participation in the speaking activities. So, it makes them good achievement in mastering speaking skill after being taught by using Socratic method. Since the Socratic method on the learning speaking skill successfully and improved the students' speaking skills and the success of the research was achieved based on hyphotesis testing, the theory can be called that the method is accepted and it can improve the students' speaking achievement at SMK NU Tulungagung toward the tenth grade in the academic year 2017/2018.