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The Effect of Time Token Technique Towards Students' Speaking Skill at Science Class at High School 1 Pariaman

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Abstract: This research aims at finding out the effect of time token technique towards students' speaking skill. This research was experiment. The population in this research was students at grade XI of High School 1 Pariaman consist of 170 students. Cluster random sampling was used to determine two classes which consist of 68 students. $MIPA_1$ was treated through time token technique while $MIPA_5$ was treated through debate technique. The result of the study showed that the mean score of experimental class was 78.41 with standard deviation 5.39 and mean score of control class was 75.71 with standard deviation 5.35. In order to prove the hypothesis, the t-test score of experimental class was compared with t-table score. It showed that the result of t-test of the experimental class was 2.094 while the result of t-table at a level of significance with $\alpha = 0.05$ was 1.997. It indicated that the t -score of experimental class was higher than t-table, 2.094 > 1.997. It means Ho is rejected and Hi was accepted. It was clear that time token technique gave significance effect towards students' speaking skill.

Keywords: Speaking Skill, Time Token Technique, Social Science, High School, Pariaman

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INTRODUCTION

Speaking is one of four important

skills that has to be mastered by students in learning English. Speaking is important for some reasons. First, it helps students to be active learners because they have something to speak. In other words, speaking avoids them to be passive learners. Second, speaking can help students to interact and communicate with others. Third, they can share their idea, thought, feeling and opinion about something through speaking. Briefly, speaking is a very crucial skill for students. The teachers want their students be active in teaching speaking in the classroom. But in the real life, teachers found that the students have low capability in speaking. In fact, there are saveral problems that cause the low of the student's speaking skill.

Based on interview about students' speaking skill at High School 1 Pariaman, the researcher found out that students faced some problems in order to practice their Speaking skill in English whether it was inside the class or outside the class. The first, the students were unable to practice their speaking skill in front of their class and also outside because they were lack of self motivation and strong influences of their environment. In other words, the students were not confident or felt shy to deliver their words although they had asked to use English all the time in order to get familiar with it. Furthermore, the environment did not support the students to speak English frequently. The environment here meant the people inside and outside the class. Their friend might think that the students just wanted to show off when they speak English for daily conversation. The response that the students got makes them loose their self-confidence to improve their speaking. Since the students did not want to be rejected by people around them, so they used their native language in daily conversation. As a result, the active students became more active while the passive students became more quiet.

The second problem of students on speaking skill was grammar. Most students were very easy to get confused with English grammar, while grammar is needed to form a right sentence. If the students did not have sufficient grammar, they would not be able to produce sentences that are grammatically correct. Realizing the grammar that the students had was very weak, they feel embarrassed when they wanted to produce English sentences orally. Third problem was students' pronunciation. They were very easy to get confused how to pronounce word correctly. Students sometimes did not know how to pronounce words in English correctly, that made they were afraid to pronounce that word and produce that words orally. In addition, the students' incorrect pronunciation was also caused by their accents in mother tongue. Therefore, they felt embarrassed to deliver words in English due to they were afraid making mistake.

Fourth, students were lack of vocabulary. Students wanted to deliver their idea through speaking but they only had minim vocabularies on their vocabularies bank though the teacher had asked them to make a list of new vocabulary that they found. It made students difficult to speak and practice their skill. In addition, they also only had limited vocabulary for one word in English that made them find hard to choose what word to say.

Moreover, the researchers also found some difficulties of the students in practice their speaking skill. The researchers taught Science class (MIPA) which consist of 5 classes. Based on the researchers' experience, when the researchers asked the students to write down their problems in speaking in a piece of paper, most of them wrote that their problems were not confident or shy,

difficult to arrange the sentence, confused to pronounce the words, had something to say on their mind but didn't know how to say it in English, worried to be laughed and mocked, and lack of vocabularies.

There are many techniques out of there that can be used to solve that problem, but in this case, the researchers used Time Token to solve this problem. It was believed that by using this technique, the students could improve their skill in speaking and find the way to practice their speaking skill whether inside or outside of the class. According to Istarani (2011:194) Time Token is very useful to promote students social skill. Time token is used to promote students' social skill to avoid the active students dominate the class while the passive students quiet, the effective way is using Time Token. It means that, by using Time Token, there will be time of talking which have been set and the chance for each student to speak. In other words, there is no quiet student, but only the active students. Since every student has the same chance to speak and deliver their ideas, it will promote a good class atmosphere and create a democratic class. In addition, Time Token can improve students' skill in speaking in front of others nor in public, so they have a skill to deliver their idea in front of many people. Since time token technique is good to promote students' social skill and speaking skill, the researchers were interested in applying the Time Token technique towards students' speaking skill at science class of High School 1 Pariaman.

Time Token is one of Cooperative Learning technique that developed by Arends in 1998. According to Arends and Kilcher (2010:306) cooperative learning is a teaching model or strategy that is characterized by cooperative task, goal, and reward structures, and requires students to be actively engaged in discussion, debate, tutoring, and teamwork. Moreover, Artz & Newman (1990:448) defines Cooperative learning as small groups of learners working together as a team to solve a problem, complete a task, or accomplish a common goal.

Furthermore, Arends (2012:384) states that Time Token is cooperative learning model where the students do cooperatives activities and help each other in understanding particular topic. In addition, Istarani (2011:194) defines Time Token technique is a structure that can be used to teach social skills, to avoid talking domination of particular students or to avoid the students silence during class activities. According to Huda (2014:239) time token is a democratic teaching instruction technique which put students as the subject. During the instructional process, the activities of the students become the main focus. In other words the students are involved actively. On the other words, this technique was used to solve the problems of students in speaking.

In addition, Istarani (2011:194) suggests several steps of Time Token activity; 1) prepare the time token coupon to be spread to the students, 2) arrange the students' seating into a discussion form, 3) every students is given a coupon to talk around 30 seconds, 4) if the student have finished their speak, it must be given to the teacher. One coupon once speaking chance, 5) the students who have run out their coupon, have no chance to speak anymore. The chance is only for those who still hand their coupon.

METHOD

This research was experiment,

which is referred to post-test only design. The post-test was given after treatment. The purpose of this research was to find out the effect of time token technique toward students' speaking skill at science class at High School 1 Pariaman. Arikunto (2010:214) defines an experimental study as the research in which there are two classes observed at the two points; they are control and experimental groups; one before the treatment and one after the treatment which was aimed at obtaining the information for the study. in this research, the researchers addressed the treatment of time token technique in teaching speaking to the experimental class.

The instrument of this research was oral speaking test inform of performance test. The data of this research were collected from students' performance test of post-test. The test was given after treatment. In order to get students' speaking scores, oral proficiency scoring is categorized by Brown (2010: 212) into some indicators for speaking assessment such as grammar, vocabulary, comprehension, fluency, pronunciation. The range scores for each indicator were between 1 to 5.

RESEARCH FINDINGS AND DISCUSSION

Time token technique was applied in experimental class and debate technique in control class. Both of experiment and control class were given the post test. The researchers took the students' speaking scores by two scorers. The test result was evaluated by concerning five components of speaking: pronunciation, structure, vocabulary, fluency and comprehension. Each component had its score. The range of possible scores were between 1 to 5. The statistical summary of the post-test is described in order to know whether there are differences among the range, mean, t-test and standard deviation for both experimental and control groups. The post-test score of the experimental class and control class is presented in the table below:

Table 1.The Statistic of the Students' Scores

Class	N	∑X	X_{max}	X_{min}	$\bar{x}$	S	S^2
Experimental	34	2666	88	68	78.41	5.39	29.04
Control	34	2574	86	66	75.71	5.35	28.64

Based on table 1, it was found that total score of experimental class was 2666 and control class was 2574. Furthermore, the highest score of experimental class was 88 and control class was 86, and the lowest score of experimental class was 68 and control class was 66. The mean scores were 78.41 for experimental class and 75.71 for control class. It was got that standard deviation of experimental class was 5.39, while control class was 5.35. Then, the variances of both classes were 29.04 experimental class, and 28.64 control class. It shown that time token technique gave significant effect toward students' speaking score where the students in experimental class got higher scores than control class.

The researchers analyzed normality test by using lilliefors testing for both samples of post-test in experiment and control class. From analyzing normality, the researchers got the value of post test experiment class was $L_{observed}$ 0.0889 < L_{table} 0.151, it could be concluded that the data was normally distributed (see appendix V-VI). The normality testing post-test of control class was $L_{observed}$ 0.1078< L_{table} 0.151. It meant both of

classes are normally distributed. It could be shown in the table below:

Table 2. The Result of Normality Testing in Post Test

Class	Lo	Lt	Interpretation
Experiment	0.0889	0.151	Lo < Lt, the data was normaly distributed
Control	0.1078	0.151	Lo < Lt, the data was normaly distributed

The researchers analyzed homogeneity testing of post-test in experiment and control class, the result of homogeny of post-test experimental class and post-test of control class were $\mathbf{F_{observed}}$ 1.01 < $\mathbf{F_{table}}$ 1.79, it can be concluded that two samples were homogeny.

Table 3. The Summary of Homogeneity in Post Test

Variable	N	S^2	Df	$F_{calculate}$		F_{table}	Interpretaion
Experiment	34	29.04	66	smaller va	Higher va	1.79	Fo<Ft the data
Control	34	28.64	66	$\frac{29,04}{28,64} = 1.01$			was homogeneity

The researchers also did hypothesis testing in order to know whether the hypothesis was accepted or rejected by comparing t-calculated and t-table. After analyzing the data, it was proved that t-test was bigger rather than t-table. It was obtained t-test was 2.094 while the value of the t-table was 1.997. It could be seen in the table below:

Table 4.The Summary of Hypothesis Testing

Variable	Speaking skill	
Group	Experiment	Control
N	34	34
Varians	29.04	28.64
Df	66	
T-test	2.094	
T-table	1.997	
Interpretation	T-test > T-table	

It means that hypothesis of this research was accepted because the t-test was bigger than t-table. It was proven that time token technique give significant effect toward students' speaking skill.

The discussion was concerned with the data that have been explained above. In general result, the experimental research was better than control class in speaking score. It was shown from the mean score of both of these classes. The experimental class had higher mean score than control class. It was 78.41

while control class was 75.71. The higher score in experimental class was 88 and control class was 86. It was supported by previous finding (Iriyanti, 2012) that time token technique gave significant effect on students' achievement.

Furthermore, Sukmayati (2014) found that the students who were taught by using Time Token Arends Technique had a better performance than those who were not. It can be seen from the result of the post-test of the experimental and the control group. The mean of the post-test of the experimental group was 48,97 while the mean of the control group was 38,10. In addition, Sinulingga (2013) found that the Time Token Technique can improve students' speaking achievement. Napitupulu (2011) stated that Time Token can increase activity and student learning result.

Yunitha (2013) found that the application of Time Token technique can improve the quality of the teaching learning process. Then, Fanani (2011) who conducted a research by comparing the students' achievement taught using time token technique and those taught using STAD technique. The finding shown that students' who were taught through time token technique had significantly better achievement than those taught through STAD.

Valentina et.al (2012) stated that the students who were taught by using Time Token technique had better achievement in the given topics. Wahyuni (2013) also stated that the application of cooperative learning model type Time Token can improve the students' understanding. Furthermore, Nisa (2014) found that time token technique was more effective in improving students' cognitive skill rather than direct instruction. It could be concluded that there was significance different in speaking performance score of students who were taught by time token technique than debate technique.

Standard deviation of post-test of experimental class was 5.39 while standard deviation of the control class was 5.35. The score distribution of the post-test of experimental research was better than control class. The t-test of experimental class was 2.094 and t-table was 1.997 with the level of significance $\alpha = 0.05$. It shown that t-test was bigger than t-table. It meant H_o was rejected and H_i was accepted. It could be concluded that time token technique gives significant effect towards students' speaking skill.

The result of this research was found that there was significant effect of time token technique toward students' speaking skill than students who were taught by debate technique. It was proven from the mean score of both classes that was seemed different score in post-test. Therefore, time token technique gave positive effect in teaching speaking at High School 1 Pariaman.

CONCLUSION AND RECOMMENDATION

Based on the findings and the discussion presented above, some conclusion are drawn related to teaching speaking by using time token technique. There was significant different in speaking performance between the students who were taught by using time token technique than students who were taught through debate technique. It was shown from the mean of post-test of both classes. Students who were taught by time token technique got higher score than students who were taught by debate technique. It was shown from the higher score of the post test of experimental

class. It was 88. Time token technique promoted students to be active in instructional activity since they were involved directly in learning activity. There was no student who became a passive student. It was also found that the students who were taught by using time token technique felt more excited, active and high motivation in learning speaking rather than students were taught by debate technique. Time token gave them the same change to speak in front of their friends.

The analyzed data showed that $T_{calculated}$ was higher than T_{table}. This indicated that hypothesis was accepted. It could be concluded that time token technique gave better effect toward students' speaking skill than applying debate technique.

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