

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

A. The Description of Subject

1. Profile of Research Setting

In year 1955, Hulu Sungai Selatan Regency which its capital city located in Kandangan has not been have a school that educates Islamic religion teachers. Seeing that situation, some figures in Kandangan agree to build an Islamic school for religion teacher education.

Based on interview with head master of school and supported by any documents in the school, to meet this need of existing of school, the foundation of education was built. It was named “Yayasan Pendidikan dan Penyiaran Agama Islam” located in Amawang Kiri Muka, HSS – Kandangan. From this foundation, pioneer of MTsN Amawang has begun, it took name in the past Pendidikan Guru Agama puteri (PGAP) 6 tahun (it took 6 years for this education level) with the founders are below:

- a. H. Zafri Zam-Zam
- b. H. Darham Hidayat
- c. H. Muhammad Arsyad
- d. H. Muhammad Ismail
- e. Guru Ibak

In year 1968, the status of private of this school was made a state own by letter of Indonesian Religion Ministry decision No.22 year 1968. Since that, the

school was known by PGAN Puteri 6 tahun and has been continuing until 1977. In 1978, this education institution has changed. The education process must be divided into two parts with the different education level by the decision letter of Dirjen Binbaga Islam No. DIII/ED/50/78/ on April 13th, 1978. And they are:

- a. Pendidikan Guru Agama Negeri (PGAN) with taking 3 years for learning
- b. Madrasah Tsanawiyah Negeri (MTsN) with taking 3 years for learning and this school is known now by MTsN Amawang Kiri.

Starting from 1978 until now, MTsN Amawang has been having many headmaster replacement, they are:

- | | |
|--------------------------------|---------------------|
| a. H. Baderan, B.A. | from 1979 – 1990 |
| b. Drs. Muchri Jusuf | from 1990 – 1993 |
| c. Drs Maisara Afif | from 1993 – 1996 |
| d. H. M. Nawawi | from 1996 – 1998 |
| e. Drs. M. Yusuf Syu'aib | from 1998 – 2009 |
| f. Dra. Hj. Norhayati Kamariah | from 2009 until now |

The distribution of the classes is as follow:

- a) Class VII consists of 7 classes,
- b) Class VIII consists of 7 classes,
- c) Class IX consists of 8 classes.

This school has 746 students and 51 teachers, consisting of 41 official teachers and 10 unofficial teachers. The number of English teachers is 6 teachers. Their background of education is Sarjana Pendidikan (S1).

2. The Description of Students' Prior Knowledge

The eighth grade students are taken as the sample of this research. They are 66 students of two classes. Class C as the experimental class consists of 32 students and Class E as the control class consists of 34 students.

This section presents the prior knowledge of the students both experiment and control classes that is obtained through the pre-test. The students of experiment class got average score 70.62 and the students of control class got 70.14. In general, the scores showed that the prior knowledge in reading comprehension for experiment and control classes were at the similar level.

3. The Description of Teaching and Learning Process

a. Experiment Class

In experiment class, the teacher used STAD in teaching reading comprehension. In pre-activities, teacher began with greeting and checking the students' presence.

In while activities, teacher distributed the reading text to the students and helped them to understand it by applying STAD technique. In this session, the teacher should divide learning procedure into five steps as below:

1. *Class Presentation*

The teacher presented the lesson. The teacher explained the lesson and asked number of questions to the students. The teacher assessed students' understanding by giving them some questions and preparing answers and explanations to students' problem, then distributing assignment for each group

2. *Teams*

The teacher divided the students into teams from different academic levels, genders and background ethnics. The composition of each team is one student with high achievement level, two students with average achievement level, and one student with achievement level. In this step, the teacher explained STAD rule to the students. Every group had to discuss the material, do the assignment and make sure all members of group understood the lesson.

3. *Quizzes*

The purpose of individual quiz is to measure how far the students understand the lesson. After finishing the group discussion, teacher gave a task for each student. Students were not permitted to help one another during the quiz.

4. *Individual Improvement Scoring*

The students collected points for their group based on the level in which quiz score exceed their starting score.

5. *Team Recognition*

Teacher gave reward for group achievement. Each group got a team score. Any group which gained the highest team score was awarded a kind of reward.

In post-activities, the teacher asked about the problems that the students passed in learning process and concluded the material and then closed the meeting.

The teaching and learning using STAD was done three times. The schedule of research in experiment class can be seen in the table below:

Table 4.1
Schedule of Experiment Class

No	Date of Meeting	Material
1	Oct 30, 2012	Pre-Test
2	Nov 6, 2012	Functional Text
3	Nov 8, 2012	Descriptive Text
4	Nov 13, 2012	Recount Text
5	Nov 20, 2012	Post-Test

From the table above, it can be seen that there are three times of observation starting from November 6th to November 13th 2012.

b. Control Class

In control class, the teacher did not use STAD as a treatment, but used conventional technique. The teacher taught the students as he was accustomed to do.

In pre-activities, the teacher opened the lesson by greeting and checked the students' presence and then asked them about things that are related with the material.

In while activities, the teacher distributed the text of reading to the students and asked them questions. Then, they discussed those questions together. After that, the teacher explained the definition of the text type, the characteristics and the meaning of the text. At the end, the teacher used this session as evaluation by asking the students to ensure their comprehension.

In post activities, the teacher asked students' problems during the learning, concluded the lesson and then closed the meeting.

Below is the table showing the schedule of the observations that are conducted in the control class.

Table 4.2
Schedule of Control Class

No	Date of Meeting	Material
1	Oct 28, 2012	Pre-Test
2	Nov 4, 2012	Functional Text
3	Nov 7, 2012	Descriptive Text
4	Nov 11, 2012	Recount Text
5	Nov 14, 2012	Post-Test

From the table above, it can be seen that there are three times of observation starting from November 4th to November 11th 2012. Each meeting was used to discuss different text type.

4. The Description of Students' performance

a. Experiment Class

Based on the observation that has been done by the researcher and one teacher, the result showed that students in experimental class had good performance, beginning from their replying the teacher's greeting when he opened the lesson.

In pre-activities, the students kept their readiness to accept the lesson by observing the media that would be used like book, pen and other thing. Besides, they were enthusiastic to answer the teacher's question as an apperception.

In while-activities, the students read the text given to them silently and discussed the content of the text, listened to the teacher's explanation about the text, and sometimes answered the teacher's question orally and paid attention to the example given by the teacher. After that, they sat in STAD groups that had been decided and listened to the teacher's instruction on how to work in groups. Then, they were given a quiz individually to make sure that they have improvement during taking them in STAD group. Finally, they collected the points from their individual test and each group had responsibility to carry every member in a movement.

In post-activities, the students were awarded especially the group who had a good progress in learning and the last the students paid attention to the teacher's feedback.

b. Control Class

The students of control class also showed good performance during the teaching and learning process that had been going on. In opening, they replied the teacher's greeting.

In pre-activities, the students in control class checked their books and pens to prepare themselves to study and answered the teacher's question orally as apperception.

In while activities, they read the text and discussed the content of the text and sometimes asked the teacher about the word's meaning. After that, when the teacher explained the text, word's meaning and text characteristics, the students paid attention to him. And then, they asked him about the unclear explanation.

In post-activities, to measure the students' understanding, they were required to do the task individually and responded teacher's feedback.

5. The Description of Students' Achievement

a. Experiment Class

The experiment class got average score 70.62 in pre-test which was categorized as good score. From the result of post-test, they got average score 79.84 which was also categorized as good score. It showed that the score increases 9.21. The detail of data can be seen in the following table:

Table 4.3
The result of the experiment class' scores

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTest	70.6250	32	11.27014	1.99230
	PostTest	79.8438	32	7.56524	1.33736

		N	Correlation	Sig.
Pair 1	PreTest & PostTest	32	.625	.000

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	PreTest - PostTest	-9.21875	8.80885	1.55720	-12.39468	-6.04282	-5.920	31	.000

Table 4.3 showed that experiment class students got a greater score on the post-test ($M=79.84$, $SE= 1.33$) than their score on pre-test ($M= 70.62$, $SE= 1.33$), $t(5.92)= 31$, $p<0.05$. In other word, this result does not support the hypothesis of no significant difference in terms of students reading comprehension in experiment class because sig. (2-tailed) $0.00 < 0.05$. It means that experiment class' scores showed a higher improvement from 70.62 (pre-test) to 79.84 (post-test).

b. Control Class

The control class got average score 70.14 in pre-test which was categorized as good score. From the result of post-test, they got average score 71.32 which was categorized as good score. It showed that the score increases 1.17. The detail of data can be seen in the following table:

Table 4.4
The result of the control group's scores

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTest	70.1471	34	8.65897	1.48500
	PostTest	71.3235	34	9.71634	1.66634

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	PreTest & PostTest	34	.682	.000

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	PreTest - PostTest	-1.17647	7.39152	1.26764	-3.75549	1.40255	-.928	33	.360

Table 4.4 showed that control class students got a greater score on the post-test (M= 70.14, SE= 1.48) than their score on pre-test (M= 71.32, SE=

1.66), $t(0.92) = 33$, $p < 0.05$. The result scores of pre-test and post-test using paired sample test showed the probability is also higher than level of significant, because the sig. (2-tailed) = 0.360 higher than 0.05. In other words, there is no significant improvement in teaching reading comprehension by using conventional technique.

B. Findings

1. Findings on the Pre-test

This research used independent t-test to find out the significant difference between the pre-test means of the two groups before the treatment given. The result of pre-test scores is presented as follows:

Table 4.5
The Means of Pre-Test Scores in Experimental and Control Group

Group Statistics					
Class		N	Mean	Std. Deviation	Std. Error Mean
PreTest	Experiment (VIIC)	32	70.6250	11.27014	1.99230
	Control (VIIE)	34	70.1471	8.65897	1.48500

Table 4.6
T-test Score in Experimental and Control Group

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
PreTest Equal variances assumed	1.935	.169	.194	64	.847	.47794	2.46522	4.44691	-5.40279
Equal variances not assumed			.192	58.153	.848	.47794	2.48485	4.49575	-5.45163

Table 4.5 showed that experimental students have a better reading ($M=70.62$, $SE=11.99$) than control students ($M=70.31$, $SE=1.48$) with the mean difference 0.47. This difference is not significant $t(0.194)=64$, $p>0.05$. In addition, table 4.6 showed that the Sig. 2-tailed value of p was 0.847, which was greater than 0.05. Therefore, it can be concluded that there is no significant difference between the mean for the experimental and control groups in pre-test.

2. Findings on the Post-test

After conducting several sessions of treatment, the post-test then was held.

The result of the post-test scores is presented below:

Table 4.7
The Means of Post-Test Scores in Experimental and Control Group

Group Statistics					
Class		N	Mean	Std. Deviation	Std. Error Mean
PostTest	Experiment (VIII C)	32	79.8438	7.56524	1.33736
	Control (VIII E)	34	71.3235	9.71634	1.66634

Table 4.8
T-test Score in Experimental and Control Groups

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
PostTest Equal variances assumed	2.490	.119	3.958	64	.000	8.52022	2.15282	4.21948	12.82096
Equal variances not assumed			3.988	61.876	.000	8.52022	2.13664	4.24898	12.79147

Table 4.7 showed that experimental group students have a higher reading score ($M= 79.84$, $SE= 1.33$) than control group students ($M= 71.32$, $SE= 1.66$) with the mean difference 8.52. This difference is very significant $t(3.958) = 64$, $p < 0.05$. In addition, table 4.8 showed sig. (2-tailed) value of p is 0.00, which is less than 0.05. Therefore, it can be concluded that there is a significant difference between the mean for the experimental and control groups' post test scores after the treatment.

3. Findings on the Documentation

The documents that are collected are the syllabus of the Junior High School. Based on the syllabus of eighth grade in the first and second semester, the competency standard of reading is focused on understanding the meaning in short functional text and simple essay of the descriptive and recount related with surroundings and recount also narrative for interaction with surroundings.

Based on this competency, there are basic competencies; reading aloud and meaningfully, response rhetoric steps of short and simple essay accurately and fluently in descriptive, recount and narrative texts form related with surroundings. From those competency standard and basic competences, the indicators are:

1. The students are able to difference between descriptive, recount and functional reading texts with rhetoric steps.
2. The students are able to read the text of three types accurately, fluently and acceptably related with surroundings.

3. The students are able to understand the reading text of descriptive, recount and functional and able to answer the questions are given to them.

Therefore, this document is the basic reference in which the researcher has to design lesson plan for both experimental and control groups. In addition, the researcher also got some photos from teaching and learning process while the research was going on.

4. Findings on the Observation

The observation process is conducted by the researcher and one of the English teachers. The observation which observes not only the performance of teacher and students in teaching and learning process, but also the effective and efficiency of the teaching process. The table 4.9 shows the interpretation of observation sheet:

Table 4.9
The Interpretation of Observation sheet

NO	Item	Experiment Class			Control Class		
		M. 1	M. 2	M. 3	M. 1	M.2	M.3
1.	Design of Lesson Plan	100%	100%	100%	100%	100%	100%
2.	Teaching Process	88,7%	97,7%	100%	90,9%	100%	100%
3.	Teaching Efficiency	91,7%	98,6%	100%	88,9%	90,5%	100%
4.	Teacher Performance	99,9%	100%	100%	98,9%	100%	100%
5.	Students Performance	70,7%	80%	99%	73,6%	82,7%	98%

This table showed that the average percentage of the design of lesson plan was 100% in both experiment and control classes. It meant that the teaching reading comprehension by using STAD and conventional technique was ready to be implemented. The implementation of teaching technique was described by teaching process which increased 2.3% in second meeting and 11.3% in third meeting of experiment class. Meanwhile, in control class, the increasing was 9.01% in the second meeting. The teaching process ran well in this class which the average percentage reached 100% in the second and third meeting. Moreover, the table also showed the increasing average of teaching efficiency and teacher's and students' performance which supported the describing of whole conditions of teaching and learning process in both classes. Therefore, it can be concluded that the participants of both classes had good response toward teaching and learning process.

5. Validity and Reliability

The validity is calculated by using Pearson Product Moment Correlation, which is available in SPSS 17 and some parts of them are conducted by using Ms. Excel. The interpretation of the statistical computation is presented in the following table:

Table 4.10
Test of Pre-Test and Post-Test Instrument Validity

VARIABLE	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
TOTAL Pearson Correlation	.207	.312	.383	.591**	.179	-	.139	.347	.362	.375
Sig. (2-tailed)	.382	.181	.096	.006	.450	.688	.560	.134	.117	.103
N	20	20	20	20	20	20	20	20	20	20
VARIABLE	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
TOTAL Pearson Correlation	-	-	.131	.383	.560*	.373	.383	.300	.333	.349
Sig. (2-tailed)	.171	.020	.470	.933	.583	.096	.010	.105	.096	.199
N	.470	.933	.583	.096	.010	.105	.096	.199	.152	.132
N	20	20	20	20	20	20	20	20	20	20
VARIABLE	X21	X22	X23	X24	X25	X26	X27	X28	X29	X30
TOTAL Pearson Correlation	.509*	.156	.282	-	.310	.456*	.542*	.453*	.514*	.320
Sig. (2-tailed)	.022	.513	.228	.523*	.183	.043	.014	.045	.021	.169
N	.022	.513	.228	.018	.183	.043	.014	.045	.021	.169
N	20	20	20	20	20	20	20	20	20	20
VARIABLE	X31	X32	X33	X34	X35	X36	X37	X38	X39	X40
TOTAL Pearson Correlation	.030	-	.027	.273	.213	.347	.283	.110	.160	.010
Sig. (2-tailed)	.899	.071	.911	.244	.366	.134	.227	.645	.501	.968
N	.899	.071	.911	.244	.366	.134	.227	.645	.501	.968
N	20	20	20	20	20	20	20	20	20	20

Table 4.10 showed the validity of each item of test instrument. According to Arikunto that the test instrument will be valid if the index correlation is higher than 0.00. From those all items, it can be seen that there are five items in pearson correlation's column are not valid, because less than 0.00 and they are: number 6, 11, 12, 24 and 32.

Meanwhile, to check the instrument reliability in pre-test and post-test, Cronbach's alpha formula on SPSS 17.0 for windows is used. Below is the table showing the result of test of reliability:

Table 4.11
The Reliability of the Instrument

Reliability Statistics	
Cronbach's Alpha	N of Items
.608	40

Table 4.11 showed that the reliability of the instrument (Cronbach's Alpha) was 0.608. According to Guilford, that reliability coefficient may be categorized as below¹:

$0.80 < r_{11} \leq 1.00$ = Very high

$0.60 < r_{11} \leq 0.80$ = High

$0.40 < r_{11} \leq 0.60$ = Moderate

$0.20 < r_{11} \leq 0.40$ = Low

$0.00 < r_{11} \leq 0.20$ = Very low

It showed that the test instrument was reliable and was in high categorized.

C. Discussion

As formulated in chapter I, this research was primarily aimed to answer the question whether the use of STAD improve students' reading comprehension or not. In order to find out the answer, several research procedures had been done which consisted of establishing the research instruments for pre-test and post-test,

¹ Guilford, J.P. (1956). *Fundamental Statistic in Psychology and Education*. New York: Mc. Graw-Hill Book Co.Inc. p. 145

finding two groups with the equal reading ability to be assigned as control and experimental group, administering pre-test, giving treatments to experimental group, and conducting post-test. All the data taken from every procedure had been computed and analyzed to draw an answer. The result of data analysis as presented in findings then showed that STAD had significantly improved the students' reading comprehension skill.

The analysis based on inferential statistics revealed that there was a significant difference between students' pre-test and post-test score in experiment class. The findings indicated that students obtained significantly higher post-test scores than pre-test scores in reading comprehension.

The findings proved that implementation of cooperative learning type STAD in reading class produced significantly positive outcome. Students showed a significant improvement in the post-test compared to the pre-test. This proved that students performed better in reading comprehension after conducting STAD in the reading lesson. Thus the null hypothesis was rejected.

The enhancement of students' reading comprehension could be due to the fact as as Miller and Peterson find that it appears to promise positive effects for students, both with and without disabilities, as reflected in increased academic achievement and improved social attitudes and behavior.²

² Miller and Peterson, *Creating a Positive Climate: Cooperative Learning*, (Indiana: Indiana University), p.2

The finding that proved STAD significantly improved the students' reading comprehension skill was obtained by comparing the mean score of both control and experimental groups. The mean score of control group in pre-test was 70.14 and the mean score in post-test was 71.31. Meanwhile, the mean score of experimental group in pre-test was 70.62 and the mean score in post-test was 79.84. It was obvious that there was progression in both control and experimental group scores. However, compared to the mean score of control group, the mean score of experimental had a greater improvement. In addition, the statistical computation had also proved that the mean scores of the two groups were significantly different.

The improvement of the mean score of experimental group was caused by treatments which were given to the students. As explained in the previous chapter, the students of experimental group had been treated three times using STAD while the control group students had not. The treatments influenced the improvement of experimental group students' score.