III. RESEARCH METHODS

3.1 Research Design

This research is a quantitative study which has *one group pretest-posttest design.* There is one class in this experimental method. The experimental class will be given treatment trough Pattern Drill Technique. This class has pretest, posttest and four times treatment. The research design could be represented as follow:

K (Random) T1 X T2

K : Experimental class (the class that was given pretest, treatment and posttest)

T1 : Pre-test (a test that was given before the treatment was applied)

T2 : Post-test (a test that was given after the treatment was applied)

X : Treatment (teaching speaking through Pattern Drill Technique)

Hatch and Farhady (1982: 20)

This research is intended to find out whether there is a significant different of the students speaking ability score from pretest to posttest after being taught by using pattern drill technique. The pretest is given to know how far the competence of the students' speaking ability before the treatment. Then, the students are given four treatments by using pattern drill technique. Posttest is given to know the progress of students' speaking ability after being given treatment.

3.2 Population and Sample

The population of this research is the first year of the SMA SUNAN KALIJAGA JATI AGUNG that consist of two classes, and one class is taken as the sample of this research. In determining the experimental class the researcher used the cluster sampling technique by using lottery. So that those all the first year class got the same chance to be the sample.

3.3 Data

The data is the students' speaking ability score before the treatment (pretest) and after treatment (posttest). The learners' performance was in terms of interpersonal dialogue concern on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension, and grammar based on the rating scale by Harris (1974: 84). The score was ranged from 20-100.

3.4 Step in Collecting the Data

In collecting the data, the researcher used following steps:

3.4.1 Selecting Speaking Topic

In selecting the speaking topic, the researcher used the syllabus of the first year of SMA student based on school based curriculum or KTSP (an English operational curriculum which is arranged and applied by each education unit) which the newest curriculum used by the School.

The topics chosen are:

1. Invitation

A. How to Invite Someone

Students should work together in pairs and read the following dialogue, one student reading one part, the other student reading the other. Finally after mastering and having good understanding about the dialogue, so they can perform it in front of the class. The dialogue can be used as a model to have similar conversations.

Dialogue

Bob: Alice, what are you doing on Sunday afternoon?
Alice: Not much, what did you have in mind?
Bob: The festival of Krakatau Mountain is going to be held on downtown. Would you like to go?
Alice: Sure, sounds like fun. What is it anyway?
Bob: Just vendors selling food, clothes, and what not, kind of like a carnival. There are also street musicians and free style of motorcycle. It's interesting to just walk around looking at the people and the sights.
Alice: What time and where do we meet?
Bob: The fair opens at 9:00, but I'm busy in the morning. How about 1:00?
Alice: OK, should I meet you somewhere there?
Bob: Why don't I pick you up at your house?
Alice: Sounds good, see you then.

Here Are the Sentences and Expression that Can Be Used in Inviting Someone

Would you like to come to my house?
Would you like come to my birth party?
Would you mind…
Do you mind…
Will you…
Could you diner with me?
Are you interested in watching movie?
Are you interested in…

B. How to Accept an Invitation from Someone

This is an example of dialogue on how we accept an invitation from someone.

David : "Hello John, good morning!"
John : "O, hello David, good morning!"
David : "How are you today?"
John : " I'm fine, how about you?"
David : "Actually I'm getting better now, yesterday I got influence.
John : "O right, that's good, what's up David? Is there any good news?
David : "Yes, actually I would like to invite you that next Saturday there will be a party in my home; my little brother is going to celebrate his birthday. So, will you come and join the party, David?"
John : "Sorry,," Pardon
David : my little brother is going to celebrate his birthday. So, will you come and join the party, David?"
John : Of course, I will come to the party.
David : "Great! Thanks, now I have to go home, there will be a guest in my home, Good Bye!"
John : "You're welcome, bye!"

Here Are the Sentences and Expression that Can Be Used in Accepting an Invitation

It sounds interesting.
It sounds good.
That is great idea.
That is great.
Sure I will.
Sure.
Ok.
Yes, certainly.
All right!
Yes I can.
Of course!

C. How to Refuse an Invitation from Someone.

This is an example of dialogue on how we refuse an invitation from someone.

David : "Hello John, good morning!"
John : "O, hello David, good morning!"
David : "How are you today?"
John : " I'm fine, how about you?"
David : "Actually I'm getting better now, yesterday I got influence.
John : "O right, that's good, what's up David? Is there any good news?
David : "Yes, actually I would like to invite you that next Saturday there will be a party in my home; my little brother is going to celebrate his birthday. So, will you come and join the party, David?"
John : "Sorry, I am afraid I could not, because I've already made other plans.
David : "Are you sure? You can not.
John : I am so sorry, I can not.
David : Well, now I have to go home, there will be a guest in my home, Good Bye!"
John : "You're welcome, bye!"

Here Are the Sentences and Expression that Can Be Used in Refusing an Invitation

I am sorry.
I can not.
I am busy.
Sorry, I am afraid I could not…
Actually I could, but…

The material for pronunciation practice

Would : /wəd/
Like : /lʌɪk/
Could : /kəd/
Come : /kʌm/
Can : /kæn/
Happy : /hæpi/
House : /hauz/
Nice : /nais/
Meet : /mi:t
To : /tu/
Do : /du/
Morning : /mo:niŋ
How : /hau/

2. Meeting and Parting.

A. How to Greet in Meeting.

B. How to Greet in Parting.

These Are some Example of Dialogues About Meeting and Parting.

Dialogue A

S1. Hello. How are you?
S2. Pretty well, thanks. And you!
S1. I'm fine, thanks.
S2. It's good to see you again.

Dialogue B

S1. Where have you been lately?
S2. I've been busy with extra work.
S1. I've had a lot of work to do too.
S2. Yes. I haven't seen you for quite a while either.

Dialogue C

S1. Hello. How's everything?
S2. Fine, thanks. How about you?
S1. Just, fine. What's new?
S2. There is nothing special.

Dialogue D

S1. I'm pleased to meet you.
S2. The pleasure is mine.
S1. I've heard John speak about you often.
S2. Only good things, I hope.

Dialogue E

S1. Look who's here!
S2. Are you surprised to see me?
S1. Sure. I thought you were in Europe.
S2. I was, but I got back yesterday.

Greet in the Meeting

How is your life?
How do you do!
Hi…
Hello…
How are you?
Good morning/ good afternoon/ good evening…
Excuse me…
Sorry…

Responses Their Friends in the Meeting

Life's good
How do you do
I am fine
Everything is ok
Good morning/ good afternoon/ good evening…

Greet in the Parting

See you later…
Nice to meet you…
It is nice to meet you...
Bye-bye…
Good bye…
Send my regards to…

Responses in the Parting

See you …
Nice to meet you too…
God bless you…
Bye…
Good bye…

The Material for Pronunciation Practice

Nice : /nais/
Meet : /mi:t
To : /tu/
Do : /du/
Morning : /mo:niŋ
How : /hau/
Like : /lʌɪk/
Could : /kəd/
Come : /kʌm/
Can : /kæn/
Happy : /hæpi/
House : /hauz/

3.4.2 Determining the Instruments of the Research

The instrument in this research was *speaking test.* The writer conduct the speaking test for the pretest and posttest, these tests aimed for gaining the data. The data is the students' speaking ability score before and after the treatment in performing a short dialogue in terms of interpersonal dialogue in front of the class. The test concerns on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension and grammar.

In achieving the reliability of pretest and posttest of speaking, *inter rater reliability* will be used in this study. The first rater is the researcher himself and the second rater is the English class teacher. Both of them will discuss and put mind of the speaking criteria in order to obtain the reliable result of the test.

Extend validity of the pretest and posttest in this research related to the content and the construct validity. The content validity of the speaking test has been previously examined by both advisors and colleagues. The content validity refers

to the materials which were based on the syllabus. The topics chosen are ***accepting and refusing an invitation and meeting and parting.*** Those topics were the representative of speaking material of School Based Curriculum or KTSP as a matter of tailoring the lesson to students' need.

Construct validity concerns with whether the test is actually in line with the theory of what it means to know the language. It means that the test will measure certain aspect based on the indicator. It is examined by referring the aspect that would be measured with the theories of the aspect namely, pronunciation, vocabulary, fluency, comprehension, and grammar.

3.4.3 Conducting Pretest

Pretest was given before the treatment was applied (teaching speaking through Pattern Drill Technique). The test was speaking test in the forms of interpersonal dialogue. The material that would be tested was in the forms of interpersonal dialogue. The material that would be tested was related to the School Based Curriculum or KTSP which is suitable with their level. Pretest was given to know how far the competence of the students in speaking skill before the treatment. The test was held for 90 minutes. The scoring system based on the rating scale by Harris.

In selecting the speaking material the researcher uses the syllabus of the first year of SMA student based on the English KTSP curriculum (an English operational curriculum which was arranged and applied by each educational unit) which is the newest curriculum used by the school. The topics chosen were ***accepting and***

refusing an invitation, meeting and parting in the terms of interpersonal dialogue. The form of the test was subjective test since there was no exact answer. The form of pretest was similar to the posttest.

3.4.4 Giving the Treatment

The researcher presented the material for treatment in experimental group through Pattern Drill Technique. There would be four times treatments in this research. Each treatment was held for 90 minutes. In selecting the speaking material the researcher used the syllabus of the first year of SMA student based on School Based Curriculum or KTSP (an English operational curriculum which is arranged and applied by each education unit) which is the newest curriculum used by the school.

The topics chosen are;

1. Invitation

    A. How to invite some one.
    B. How to accept an invitation from someone
    C. How to refuse an invitation from someone.

2. Meeting and Parting.

    A. How to greet in meeting.
    B. How to greet in parting.

The topic is in terms of interpersonal dialogue.

The Procedure of Teaching Speaking through Pattern Drill Technique as follows:

A. Pre Activities

- The teacher greats the students.
  - ❖ Good morning my students
- The teacher checks the student's attendance list.
- The teacher asks the students some question about invitation.
  - ❖ Do you know how to invite someone and accept and refuse an invitation? What are the expressions that commonly used to it?
- The teacher gives a chance for some of the students to give their opinion.
- The teacher introduces the Pattern Drill Technique to the students and explains them about the rule how to study by using Pattern Drill Technique.

B. While Activities

- The language teacher gives a brief summary of the content of the dialogue about invitation. The dialogue is not translated but equivalent translation of key phrase should be give in order for the language learners to comprehend the dialogue.
- The teacher gives expressions that are commonly used with the meaning related to an invitation and how to pronounce difficult words.
- The language learners listen attentively while the teacher reads or recites the dialogue at normal speed several times.
- The teacher shows the gesture and the facial expression about the action that is consisted in the invitation dialogue.

- The teacher asks the students to repeat each line of the sentences after the teacher mention it before.
- The teacher drills the students about the invitation dialogue (Repetition of each line by the language learners in chorus is the next steep. Each sentences may be repeated a half dozens of times, depending on its length and on the alertness of the language learners. If the teacher detects an error, the offending learner is corrected and is asked to repeat the sentence).
- The teacher asks the students to repeat the sentences with groups decreasing in size, that is, first the two halves of the class, then thirds, and then single rows or small groups. Group can assume the speakers' roles.
- The teacher asks the student to memorize the sentences that have been repeated by them before.
- The teacher asks pairs of individual learners to go to the front of the classroom to act out the dialogue (by this time the learners should have memorized the text).

C. Post Activities

- The teacher asks them whether they have some difficulties related to the topic.
    - ❖ Well my student before we end this meeting, do you still have any difficulties about our topics today.

- The teacher asks them' what they have learnt?" and asks some students to conclude the topic.
- The teacher ends the class.
    - ❖ My students, I think that was the material for today. Do not forget to read and memorize the material that we have learnt today.

3.4.5 Conducting Posttest

The posttest is administered after treatment, which last 90 minutes. It aimed to know the progress of the students' speaking ability after being given the treatment using Pattern Drill Technique. The scoring system based on the rating scale by Harris.

In conducting the posttest the learners were provided some topics and guided to make a short dialogue in group. Each group consists of 2-3 students. The test was done orally, and directly the teacher calls the group one by one to come in front of the class to perform their dialogue. The learners were asked to speak clearly since their voice will be recorded during the test. The material for pretest and posttest was taken from the students' handbook. The form of the test was subjective test since there was no exact answer.

3.4.6 Analyzing, Interpreting and Concluding the Data Gained

After collecting the data that was the students' utterances in performing the dialogue, the recorded voices were listened carefully by the two raters. The data

analyzed referring the rating scale namely pronunciation, vocabulary, fluency, comprehension and grammar. And then interpreting the data was done.

First, scoring the pretest and posttest, and *then* tabulating the result of the test and calculating the mean of the pretest and posttest for experimental group. *Finally* drawing the conclusion from the tabulated result of the pretest and posttest, that was by statistically analyzed the data using *Repeated Measures Independent T-Test of SPSS (statistical package for social science) version 12.0 for windows* since when we have paired data (either the S and two scores or matched Ss on one measures) we needed to use t-test which is appropriate for sets of paired data. The data were gained from one group and the writer intended to find out whether there was a significant improvement of students' speaking ability.

3.5 Validity of the Test

A test can be considered valid if the test measure the object to be measured and suitable with the criteria (Hatch and Farhady, 1982; 250). According to the Hatch and Farhady (1982; 281) there are two basic types of validity; content validity and construct validity.

3.5.1 Content Validity

Content validity is concerned with whether the test is sufficiently representative and comprehensive for the test. In the content validity, the material is given suitable with the curriculum. Content validity is the extend to which a test measures a representative sample of the subject meter content, the focus of

content validity is adequacy of the sample and simply on the appearance of the test. (Hatch and Farhady, 1982; 251).

The topics chosen are:

1. Invitation
    - **A.** How to invite some one.
    - **B.** How to accept an invitation from someone
    - **C.** How to refuse an invitation from someone.
2. Meeting and Parting.
    - **A.** How to greet in meeting.
    - **B.** How to greet in parting.

Those topics were the representative of speaking materials of School Based Curriculum or KTSP as a matter of tailoring the lesson to students' need.

3.5.2 Construct Validity

Construct Validity is concerned with whether the test is actually in line with the theory of what it means to know the language that is being measured, it would be examined whether the test question actually reflect what it means to know a language. In this research the researcher focused on speaking ability in forms of interpersonal dialogue.

3.6 Reliability of the Test

In measuring the reliability of this test, the researcher used the formula of Shohamy (1985:70) because in measuring the reliability of speaking test inter-rater reliability is the most appropriate way. The researchers choose this formula because Shohamy provided the inter-rater reliability while Hatch and Farhady did

not. Reliability refers to extend to which the test is consistent in its score and gives us an indication of how accurate the test score are (Shohamy, 1985:70). In achieving the reliability of the pretest and posttest of speaking, *inter rater reliability* is used in this study. The first rater is the researcher himself and the second rater is the English teacher. All of them discussed and put mind of the speaking criteria in order to obtain the reliable result of the test.

The Statistical Formula for Counting the Reliability Is As Follow:

$$\mathbf{R = 1 - } \frac{6.\left(d^2\right)}{N.\left(n^2 - 1\right)}$$

Notes:

R = Reliability

N = number of students

D = the different of rank correlation

1-6 = constant number

(Shohamy, 1985)

The Standard of Reliability

1. A very low reliability ranges from 0.00 to 0.19
2. A low reliability ranges from 0.20 to 0.39
3. An average reliability ranges from 0.40 to 0.59
4. A high reliability ranges from 0.60 to 0.79
5. A very high reliability ranges from 0.80 to 0.100

Slameto (1988:147)

3.7 Speaking Test

The researcher conducted speaking test, which last for 90 minutes. In conducting the test the learners were provided a topic and guided to make a short dialogue in group. Each group consists of 2-3 students. The test was done orally, and directly the teacher called the group one by one in front of the class to perform the dialogue.

The learners were asked to speak clearly since their voice was recorded during the test. The material of the test was taken from their handbook. The form of the test was subjective test since there were no exact answers. The score of the students' speaking ability was given based on the oral rating sheet provided. The teacher assessed the students concerned on five aspect namely pronunciation, vocabulary, fluency, comprehension, and grammar. In this test inter rater was applied; the first rater is the researcher himself and the English teacher as the second rater.

3.8 Criteria for Evaluating Students' Speaking Ability

In evaluating the students' speaking scores, the researcher and the second rater listen to the students' record voice. The students' utterances were recorded because it could help the raters to evaluate more objectively. Based on the oral rating sheet from Harris (1974:84), there were five aspects to be tested namely, pronunciation, vocabulary, fluency, comprehension, and grammar.

Here Were the Rating Scales;

Table of Rating Scale

Aspects of speaking	Rating scales	Description
Pronunciation	5	Speech is fluent and effortless as that native speaker.
	4	Always intelligible though one is conscious of a definite accent.
	3	Pronunciation problems necessitate concentrated listening and Occasionally lead to understanding.
	2	Very hard to understand because of pronunciation problem most Frequently be asked to repeat.
	1	Pronunciation problem so severe as to make speech unintelligible.
Vocabulary	5	Use of vocabulary and idiom virtually that is of native speaker.
	4	Sometimes use inappropriate terms and must rephrase ideas, because of inadequate vocabulary.
	3	Frequently use the wrong word, conversation somewhat limited because of inadequate vocabulary.
	2	Misuse of words and very limited vocabulary make comprehension quite difficult.
	1	Vocabulary limitations so extreme as to make conversation virtually impossible.
	5	Speech is fluent and effortless as that of native speaker.

Fluency	4	Speed of speech seems rather strongly affected by language problems.
	3	Speed and fluency are rather strongly affected by language problems.
	2	Usually hesitant often forced into silence by language problems.
	1	Speech is so halting and fragmentary as to make conversation virtually impossible.
Comprehension	5	Appear to understand everything without difficulty.
	4	Understand nearly everything a t normal speed although occasionally repetition may be necessary.
	3	Understand most of what is said at slower that normal speed with repetition.
	2	Has great difficulty following what is said can comprehend only" social conversation" spoken slowly and with frequent repetition.
	1	Can not be said to understand even simple conversation in English.
Grammar	5	Grammar almost entirely in accurate phrases.
	4	Constant errors control of very few major patterns and frequently preventing communication.
	3	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	2	Few errors, with no patterns of failure.
	1	No more than two errors during the dialogue.

Fig. 1

The scores of each point were multiplied by four;

Hence, the highest score was 100

Here the identification of the scores

If the students got 5, so5 x 4 = 20
4, so 4 x 4 = 16
3, so 3 x 4 = 12
2, so 2 x 4 = 8
1, so 1 x 4 = 4

For instance:

A student got 5 in Pronunciation, 3 in Vocabulary, and 3 in Fluency, 2 in Comprehension. and 2 in Grammar. Therefore, the student's total score would be:

Pronunciation	4 x 4 = 16
Vocabulary	3 x 4 = 12
Fluency	3 x 4 = 12
Comprehension	4 x 4 = 16
Grammar	3 x 4 = 12
Total	68

It means he or she got 68 for speaking.

3.9 Data Analysis

To analyze the data of the students' score in the pretest and posttest the writer computed them by using the formula as follows:

$$M = \frac{\Sigma x}{N}$$

Notes:

M = mean (the average score)

X = students score

N = total number of students

(Arikunto,1997:68)

Then the mean of pretest was compared to the mean of posttest to see whether Pattern Drill Technique had a positive effect toward students speaking ability or not.

After the data have been collected the writer treated the data by using the following procedures:

1. **Putting the Data of Score of Pretest (T1) and Posttest (T2) on Table below:**

S' code	**Pronunciation**		**Vocabulary**		**Fluency**		**Comprehension**		**Grammar**		**Total**	
A	**R1**	**R2**	**R1**	**R2**	**R1**	**R2**	**R1**	**R2**	**R1**	**R2**	**R1**	**R2**
B												
N	**=**										**X1=**	**X2=**

Fig. 2

Row Data of Oral Test

No	**Students' code**	**Rater 1**		**Rater2**	
		Pre-test	**Post-test**	**Pre-test**	**Post-test**
1	**A**				
2	**B**				
3	**C**				
….					

Fig. 3

Inter-rater Reliability of Pre-test

No	Students' code	R1	R2	D	D^2

Fig. 4

Reliability of Pre-test:

$$\mathbf{R = 1 - } \frac{6.\left(d^2\right)}{N.\left(n^2 - 1\right)}$$

Notes:

R = reliability

N = number of students

D = the different of rank correlation

1-6 = constant number

(Shohamy, 1985)

3.9 Data treatment

According to Setiyadi (2006:168-169), using T-Test for hypothesis testing has 3 basic assumptions, namely:

1. The data is interval or ratio
2. The data is taken from random sample in population
3. The data is distributed normally

3.10 Hypothesis Testing

The hypothesis testing is stated as follow:

1. **There Is a Significant Different of Students' Speaking Ability after Being Taught through Pattern Drill Technique.**
2. **There Is a Significant Improvement of Students' Speaking Ability after Being Taught through Pattern Drill Technique.**