

III. RESEARCH METHOD

This research is intended to find out whether Three-Step Interview can be used to increase students' speaking achievement or not. This chapter includes the research design, the population and sample, data collecting technique, research procedure, criteria for evaluating students' speaking, reliability, and validity of the instrument, speaking test, data analysis, and hypothesis testing.

3.1 Research Design

This research is quantitative research. It was carried out to see and find out the result of implementing three-step interview in increasing students speaking achievement. In conducting the research, the researcher used time series design by giving different topics in every treatment and every test. The researcher used one class where the students gave three times treatment and three times post-test. The research design can be represented as follows :

$$X_1T_1X_2T_2X_3T_3$$

In which:

T1 : Post test 1 (first topic is School Uniform, Another Good Lesson)

T2 : Post test 2 (Second topic is Home Schooling)

T3 : Post test 3(Third topic is Mobile Phone in School)

X1 : Treatment 1

X2 : Treatment 2

X3 : Treatment 3

(Hatch and Farhady, 1982:24).

3.2 Population and Sample

The population of the research was the students of the second year students at SMA N 1 Raman Utara that consisted of six classes, and class XI science 2 was taken as the sample. The sample of the research was chosen randomly from five classes by using lottery because the participant have similar chance to be chosen and in order to avoid the subjectivity in this research.

3.3 Data Collecting Technique

In collecting the data, the researcher used :

a. Treatment

The treatment was conducted in three times. One treatment was 2 x 45 minutes of each meeting. The researcher presented the topics of hortatory exposition. There are three topic. First, school uniform, another good lesson. Second, home schooling. Third, mobile phone in school. The topic was based on second semester of the second year students.

b. Posttest

The researcher administered the post test was taken 90 minutes. The purpose of this test was to know the students' increase in speaking after the research gave the treatment through three-step interview.

3.4 Research Procedure

The procedure of the research as followed :

1. Selecting Speaking material

In selecting the speaking material the researcher used the syllabus of the second years of Senior High School Raman Utara based on school curriculum or KTSP (an English Operational Curriculum which is arranged and applied by each education unit).

2. Determining the Instruments of the Research

The instrument in this research is speaking test. The writer conducted the speaking test for posttest, this test aimed at gaining the data was the students' speaking achievement score after the treatment in performing interview. In achieving the reliability test, inter rater reliability was used in this research. The first rater was the researcher and the second rater was the English teacher. Both of them discussed and shared ideas of the speaking criteria in order to obtain the reliable result of the test. Construct validity, in this research the writer focused on speaking ability in three-step interview. Those topic were the representative of speaking materials of School Based Curriculum or KTSP.

3. Determining the Population and Sample

The population of this research was the second grade of SMA N 1 Raman Utara. There are five classes and XI science 2 was taken as sample. The sample was selected using sample probably sampling through lottery. The class chosen was science class consisting of 30 students.

4. Conducting Treatment

The researcher gave the treatments using three step interview technique. The treatment was done in three meetings in which 90 that conducted three different topics in every meeting. In selecting the material the researcher used the syllabus of the second year student of Senior High School students Based on Curriculum or KTSP. And the next, the researcher asked the students for doing cooperatively with their partner. The procedure of teaching speaking through three-step interview technique as follows :

- a. Pre – Activities
- b. While – Activities
- c. Post – Activities

5. Conducting the Posttest

The researcher administered the post – test after treatment. It aimed to know the progress of students' speaking achievement after being given the treatment using the three-step interview. Based on the design of this research that is time series design, post – test conducted in three times, after each meeting or after each treatment. The researcher used a subjunctive test in oral test. Furthermore, the researcher gave different topics in every test. The test was done orally and directly. The researcher asked the students to make some questions related to the topic, after that the students shared their arguments by using interview practices . The teacher called each pair one by one in front of the class to perform their

interview. The researcher asked the students to speak clearly since their voice will be recorded during the test.

6. Analyzing the Data

After conducting the final test, the researcher analyzed the data. After collecting the data, the students' worksheet was analyzed subjectively by both researcher and teacher.

First, the data, in form of score, gained from post test were tabulated and calculate inter-rater reliability. *Then*, calculate minimal score, maximal score, and mean of the post test and its standard deviation. *Repeated Measures T-test (statistical package for social science)* or *paired sample T-test* was used to draw the conclusion. The comparison of two means counted using Repeated Measures T-test would tell us whether students speaking ability can improve significantly. *Finally*, The data were compute through SPSS version 17.0 that shown two tail significance for equal variances as the value of significance.

3.5 Criteria for Evaluating Students' Speaking

The form of the test is subjective test since there is no exact answer. In this test the researcher used inter rater to assess students' performance. The performance were given score and recorded together by the researcher and the English teacher. The rater gave the score by record the students' performance. The researcher recorded the students utterances because it helped the raters to evaluate more objective. The test of speaking was measured based on two principles, reliability and validity.

3.6 Reliability

Reliability refers to extend to which test is consistent in its score and gives us an indication of how accurate the score test are. The concept of reliability stems from the ideas that no measurement is perfect even if we go to the same scale there will always be differences.

To be ensure the reliability of score and to avoid the subjectively of the researcher, inter rater reliability applied in this research. Inter-rater reliability was used when score independently of estimated by two or judge. To achieve such reliability, in judging the students' speaking performance. The researcher, uses a speaking criteria based on Harris (1974 : 84) . The focus of speaking skills that have been asses are : pronunciation, grammar, vocabulary, fluency, comprehension. And second rater in using the profile to give judgment for each students' speaking performance. The second rater is English teacher who has experience in rating students' speaking. This is means to provide consistent and fair judgment.

The statistical formula for counting the reliability is as follow :

$$R = 1 - 1 - \frac{6 \cdot \sum d^2}{N(N^2-1)}$$

Note:

R = Reliability

N = Number of Students

D = the different of rank correlation

1-6 = Constant number

(Shohamy, 1985)

After finding the coefficient between raters, researcher then analyzed the coefficient of reliability with the standard of reliability below :

- a. A very low reliability (range from 0.00 to 0.19)
- b. A low reliability (range from 0.20 to 0.39)
- c. An average reliability (range from 0.40 to 0.59)
- d. A high reliability (range from 0.60 to 0.79)
- e. A very high reliability (range from 0.80 to 0.100)

Slameto (1998:147)

After calculating the data, the result of the reliability can be seen following tables :

Raters Reliability

Reliability	Pretest	Posttest	Criteria
	0.86	0.99	Very high reliability

From the criteria of the reliability and the calculating above, it can be concluded that the reliability of the rater is very high. It means that the first rater's way of scoring was similar to the researcher's. They had almost the same scoring system.

3.7 Validity

Validity refers to extent to which the test measures what was intended to measure. This means that it relates directly to the purpose of the test. Content validity, the test is a good reflection of what has been taught and the knowledge which the teacher wants his students to know. Content validity can best be examined by the table of specification (Shohamy, 1957 : 74). Construct validity concerns with whether the test is actually in line with the theory of what it means to the language (Shohamy : 74) that is being measured, it would be examined whether the test actually reflect what it means to know a language. it means that the test will measure certain aspect based on the indicator.

The researcher has to compare the test with table of specification to know whether the test is good reflection of what has been taught and the knowledge by the teacher wants the students to know. A table of specification is an instrument that helps the test constructor plans the test. The table of specification :

Aspect	Theories
Pronunciation	It refers to the ability to produce easily comprehensible articulation. (Syakur, 1987). Pronunciation refers to the intonation patterns (Harris, 1974 : 81)
Vocabulary	Vocabulary mans the appropriatee diction which is usd in commuicaion (Syakur , 1987). Vocabulary refers to the selection of words that suitable wih content (Harris,

	1974 : 68-69)
Fluency	Fluency refers to the use and speed of the flow of the speech (Harris, 1974 : 81)
Comprehension	It defines that comprehension or oral communication that requires a subject to respond to speech as well as to initiate it (Syakur, 1987).
Grammar	It is needed for students to arrange a correct sentence in conversation (Syakur, 1987). It is students' ability to manipulate and to distinguish appropriate grammatical form in appropriate ones (Heaton, 1978 : 5)

3.8 Speaking Test

The researcher conducted speaking test which lasted 90 minutes. In conducting the test the researcher provided a topic. Each group has to make some questions that the test was done orally, the teacher divided the students in pair. The teacher called the group one by one in front of the class to perform their interview. The researcher asked the students to speak clearly since the students' performance is being recorded during the test. The material for test was taken from the questions given and their handbook. The form of the test was subjective test there is no exact answer. The teacher gave the score of the students' speaking ability based on the oral rating sheet provide. The teacher assessed the students concern on three aspect namely, pronunciation, grammar, vocabulary, fluency, and comprehension. In the test the researcher

used the inter rater, that were the researcher and the English teacher. In evaluating the students' speaking scores, the researcher, and another rater, which is the class teacher, listened to the students record and used the oral English. The researcher recorded the students' utterance because it helps the raters to evaluate more objectively. Rating sheet modified from Haris (1974). Based on the oral rating sheet, there are five aspects to be tested namely, pronunciation, grammar, vocabulary, fluency, and comprehension. Here the rating scales.

Pronunciation

5. Has few traces of foreign accent.
4. Always intelligible though one is conscious of a definite accent.
3. pronunciation problems necessitate concentrated listening and occasionally lead to misunderstanding.
2. very hard to understand because of pronunciation problems must frequently be asked to repeat.
1. pronunciation problems too severe as to make speech virtually unintelligible.

Grammar

5. Make few (if any) noticeable errors of grammar or word order.
4. Occasionally makes grammatical and / or word order which do not, however, obscure meaning.
3. make frequent errors of grammar and word order errors, obscure meaning.

2. Grammar and word orders make comprehension difficult must often rephrase sentence and / or restrict him to basic pattern.

1. errors in grammar and word order to serve as to make speech virtually unintelligible.

Vocabulary

5. Use of vocabulary and idioms is virtually that of narrative speaker.

4. Sometimes uses inappropriate terms and / or must rephrase ideas because of lexical inadequacies.

3. Frequently uses the wrong words, conversation somewhat limited because of inadequate vocabulary.

2. Misuses of words and very limited vocabulary make comprehension quite difficult.

1. vocabulary limitation to extreme as to make comprehension virtually impossible.

Fluency

5. Speed as fluent and effortless as that of native speaker problems

4. Speed of speech seems to be slightly 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 as halting and fragmentary as to make conversation virtually impossible.

Comprehension

5. Appears to understand everything without difficulty.

4. Understand nearly everything at normal speed although occasionally repetition may be necessary.

3. Understand most of what is said at lower than normal speed with repetition.

2. Has great difficulty following what is said. The student can comprehend only "social conversation" spoken with frequent repetition.

1. Can not be said to understand even simple conversation of English.

The score of each point was multiplied by four, so the highest score is 100.

Here is identification of the scores.

If the student gets 5, so $5 \times 4 = 20$

4, so $4 \times 4 = 16$

3, so $3 \times 4 = 12$

2, so $2 \times 4 = 8$

1, so $1 \times 4 = 4$

For example :

A student gets 4 in pronunciation, 3 in vocabulary, 3 in fluency, 4 in comprehension, and 3 in grammar. Therefore, the student's total score will be:

Pronunciation $4 \times 4 = 16$

Vocabulary $3 \times 4 = 12$

Fluency $3 \times 4 = 12$

Comprehension $4 \times 4 = 16$

Grammar $3 \times 4 = 12$

Total 68

It means that he / she gets 68 for speaking.

The score of speaking is based on the components that can be converted in the percentage.

3.9 Data Analysis

Data analysis is a process for organizing the data in order to get the explanation form. The researcher analyzed the data by using these following steps :

1. Transcribing the Students' Speaking

The researcher recorded the students' spoken, the researcher transcribed the record into written form.

2. Scoring Data

Each rater scored the students speaking performance in post test.

Based on the scores between two raters are the researcher found the average and is analyzed statistically by using Repeated Measures t-test.

3. Drawing Conclusion

The researcher calculates the data such as the highest score, lowest score, mean score, and standard deviations are counted. To draw conclusion the means of students score in posttest is compared to see the value of significance by using Descriptive statistics of SPSS version 17.0.

3.10 Hypothesis Testing

The hypothesis is analyzed by using Repeated Measures T-Test which is also called as Paired Sample T-test of SPSS version 17.0 in order to know the significance of the treatment effect.

Hypothesis of this research:

H₀ : There is no significant difference of students' performance after applying Three – Step Interview technique in 3 different topics.

H₁ : There is a significant difference of students' performance after applying Three – Step Interview technique in 3 different topics.

The researcher used t-test in order to find out the significance of treatment effect.

The hypothesis was analyzed at significant level of 0.05. It means that the probability of error in the hypothesis is only 5% from 100% and the hypothesis was approved if $p < 0.05$.