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III. METHOD

In this research, the researcher discusses about research design, population and sample, variables, the data collecting technique, research procedure, instruments, validity and reliability, data analysis and hypothesis as states below:

3.1. Research Design

This research was intended to find out the significant difference of the students' speaking skill in form of recount model before and after being taught by using picture series and to find out which kind of picture series gave the highest effect. In conducting the research, the researcher used time series design by giving different picture series for each treatment and different topics for every test. The researcher used one class in which the students were given three times pretest, three times treatment, and three times posttest. The research design is ilustrated as follows:

$$T1\ T2\ T3\ X\ T4\ T5\ T6$$

Where:

T1 T2 T3   : Pre-test

X   : Treatment

T4 T5 T6   : Post-test

(Hatch and Farhady, 1982)

Pretests were administered before the treatments of teaching speaking by using picture series media. Pretests were implemented in order to see the students' basic speaking ability. Then, the researcher gave treatment that is teaching speaking by using picture series media.

3.2. Population and Sample

This research was conducted in the first year of second semester students at SMA Negeri 1 Pagelaran academic year 2014. The researcher chose this school because the researcher wanted to investigate the increase of students' speaking skill in form of recount text. There were five classes of the first grade and every class had the same oportunity to be chosen. In determining the class to be the sample, the researcher used random sampling by using lottery drawing. The sample of the research is the students of class X 3 which consists of 30 students.

3.3. Data Collecting Technique

The data of this research was in the form of students' speaking ability score in performing monologue in terms of pronunciation, fluency, and comprehensibility under three topics: daily activities, special moment, and holiday. In collecting the data, the researcher used the following steps:

3.3.1 Procedure of Teaching Speaking through Picture Series

Procedure of using picture series in the class is divided into three terms. They are pre-activity, while-activity, and post-activity. Here are the procedure of teaching speaking trhrough picture series.

1. **Pre Activity**

   a. Teacher greets the students.

   b. Teacher gives the questions or brainstorming to the students related to the topic they are going to learn.

   c. Teacher gives a chance for students to share their ideas.

2. **While Activities**

   a. The teacher tells his experience about his vacation to the beach to the students

   b. Teacher hands out series of picture and groups the students into 3 people each group.

   c. Teacher guides the students discussing the pictures

   d. Teacher asks students to explain the picture to their group.

   e. Teacher asks students to tell their result discussion in front of the class.

   f. Teacher evaluates students' speaking ability, such as, pronounciation, fluency, and comprehensibility and organization of the text they perform.

3. **Post Activity**

   a. Teacher gives comment and explains necessary things such as correction and how to do a monologue

   b. Teacher gives a chance to students to ask question about the material.

   c. Teacher asks students about the lesson and the problem during the lesson.

    d. Teacher closes the class by greeting.

3.3.2 Speaking Test

In collecting the data, the researcher conducted speaking test. There were three times of tests before treatments and three times of tests after treatments. the researcher provided three different topics that had been done orally and direct. Teacher called students one by one in front of the class to perform their sentences. The teacher gave the score of the students' speaking ability based on three aspects namely pronunciation, fluency, and comprehension.

This oral test was measured through three aspects of students' speaking skill. The scoring criteria that was used was based on Heaton (1991).

Table 2.1. Rubric of Scoring System

Range	Pronunciation	Fluency	Comprehensibility
81-90	Pronunciation only very slightly influenced by mother tongue.	Speaks without too greats effort with a fairly wide range of expression. Searches for word an occasionally but only one or two unnatural pauses.	Easy for listener to understand the speakers intention and general meaning.
71-80	Pronunciation is slightly influenced by the mother tongue. The most utterance are correct.	Has to make an effort at times to search for words. Nevertheless smooth very delivery on the whole and only a few unnatural pauses.	The speakers intention and general meaning are fairly clear a few instruction by listener for the sake of clarification or necessary.

61-70	Pronunciation still moderately influenced by the mother tongue but no serious phonological error.	Although she/he has made an effort and search for words, there are not too meaning unnatural pauses. Fairly smooth delivery mostly.	Most of the speaker say is easy to follow. His attention is always clear but several interruptions are necessary to have him to convey the message or to see the clarification.
51-60	Pronunciation is influenced by the mother tongue but no serious phonological error.	Has to make an effort for much of the time. Often has to search for the desired meaning. Rather halting delivery and fragmentary.	The listener can understand a lot of what is said, but he must constantly seek clarification. Cannot understand of the speakers more longer or complex sentence.
41-50	Pronunciation is influenced by the mother tongue with errors causing a breakdown in communication.	Long pauses while he/she searches for desired meaning. Frequently halting delivery and fragmentary. Almost gives up for making the effort a times.	Only small bits (usually short and sentence and phrases) can be understood and then with considerable effort by someone used to listening the speaker.

The interpretations of grading system are as follows:

81-89 : excellent

71-80 : very good

61-70 : good

51-60 : fair

41-50 : moderate

The test was scored by two raters, the researcher himself and one of English teacher at the school as another rater to reach the realibility of the test. In collecting the data, researcher used the following steps:

1. Pretest

The researcher administered pretest before treatment which was aimed at knowing the students' speaking skill before being given the treatment by using picture series. The researcher administered the pretest to whole students in the class. Meanwhile, before conducting the pretest, the researcher explained the topics that were tested. The tests were focused on oral test. The researcher recorded the students' performance in order to help the researcher in scoring the oral test. So, if the researcher sliped the students' performance during the scoring, the researcher could replay the record.

2. Treatment

Treatments were done after pretest to teach the students by using picture series. There were three times of treatments. The first treatment was on september 23 with the topic activities this morning. The second treatment was on september 27 with the topic special moment. And the third treatment was conducted on september 30 with the topic holiday.

The researcher taught the students with the target to reach the objectives in those 3 meetings as stated in lesson plan. There were 3 lesson plans to be implemented for three different topics.

3. Posttest

The posttest was administered after the treatment which was aimed at seeing the significant difference of the students' speaking skill after they were taught by using picture series. The posttest was similar to the pretest. The posttest

was administered to whole students by recording them one by one. So the researcher could score every student's performance by playing the record.

4. Recording

The researcher recorded the students' speaking skill during pretest and posttest by using audio recorder as the recording tool. It was used to help the researcher in scoring the students' speaking test. So if the researcher slipped the students' performance during the test, the researcher could replay the record.

3.4. Research Procedures

The procedures of the research were as follows:

1. Selecting and Determining the Population and Sample

The population of the research was the students of SMA Negeri 1 Pagelaran as population. The sample was class X 3, there were 30 students. Their ages ranged from 15 to 16 years old. The researcher used one class as the sample of the research.

2. Selecting the Materials

The materials were taken from the students' book based on the syllabus. The material was about daily activities, special moment, and holiday. The researcher conducted three different topics with three different picture series

3. Administering the Pretest

The pretest was administered before treatment which was aimed at knowing the students' speaking skill before being given the treatment by using picture series. The researcher administers the pretest to students. Meanwhile, before conducting the pretest, the researcher explained the topic that would be tested. The test was focussed on oral test. The test was administered three times by giving different topics in each test, they were, first pretest (1st topic: activities this morning), second pretest (2nd topic: special moment), and the third pretest (3rd topic: holiday). It was a subjective test and focuses on oral test. The researcher explained generally the test and asked the students to work in group. The researcher gave the direction in each test to all students and asked the students to tell it in front of class one by one. In performing the test, the students were asked to speak up clearly since the students' voices were recorded. Furthermore, the researcher and another English teacher judged the students' performance.

4. Conducting the Treatments

In this research, the treatments were administered in three meetings in 90 minutes for each meeting with three different topics and picture series in every meeting. The topic which used in the first treatment is about "activities this morning" by applying picture series from comic books, the second is about "Special moment" by applying picture series from capturing animation movie, and the third topic was about "Holiday" by applying picture series taken from internet. At the first treatment, the researcher asked the question related to the topic. The researcher also explained the material by using picture series.

5. Administering the Posttest

The posttest was conducted after the treatment. The post-test was aimed at knowing the progress of speaking skill after being taught by using picture series media. The posttest was conducted three times, after three meetings/treatments. The researcher used a subjective test in oral test. Furthermore, the researcher gave different topics in every test. The researcher asked the students to speak up clearly in front of class since the students' voice was recorded. Moreover, the researcher and the English teacher "Mrs LS" judged the students' performance. "Mrs LS" graduated from English Department of Lampung University and now she has been teaching at SMA Negeri 1 Pagelaran for 8 years.

6. Analyzing the Test Result (Pretest and Posttest)

After scoring the students' performance, the researcher compared the result of pretest and posttest, to see whether the score of posttest was higher than pretest in each aspects of speaking.

3.5. Instruments of the Research

There are two instruments that were used in this research, pretests which were given to the students before the researcher gave the treatments, and posttests which were given after the students got the treatments.

3.6. Validity and Reliability of the Instrument

In order to make research valid and reliable, quantitative research is focused on the collected data (Setiyadi, 2006:29). Since the researcher used quantitative research, some considerations were also taken as follows:

a. Validity of the Test

Validity refers to the appropriateness, meaningfulness, and useful of the inferences a researcher makes (Fraenkel and Wallen, 1990:126). It means that validity refers to the extent to which an instrument will give us the information that we want. Meanwhile, Setiyadi (2006: 24) mentions that the test should reflect all the areas to be assessed in suitable proportions and represent a balanced sample.

Other source says that validity is a matter of relevance: it means that the test measures what is claimed to measure. To measure whether the test has good validity, it has to be analyzed from content and construct validity. In the content validity, the material and the test are composed based on the indicators and objective in syllabus of the curriculum. The materials that were taught based on the students' handbook for Senior High School. While, the construct validity focuses on the kind of the test that use to measure the students' ability. The tests were administered based on the indicators which state that students were able to do a monologue related to the material taught.

b. Reliability of the Test

Reliability refers to the extent to which the test is consistent in its scores, and it gives an indication of how accurate the scores. Reliability is a necessary characteristic of any good test: to be valid, a test first should be reliable as a measuring instrument (Heaton, 1988:162).

To ensure the reliability of the score and to avoid the subjectively of the researcher, inter rate reliabilities applied in this research. Inter rater reliability was used when score of the test is independently estimated by two raters. To achieve such reliability and to score the students' speaking performance, the researcher:

1. The researcher used a speaking criteria based on Heaton (1991). The focuses on speaking skills that were assessed are;

a. Pronunciation

c. Fluency

d. Comprehensibility

2. The researcher involved second rater in using the profile to give judgment for each student's speaking performance. The second rater was the English teacher who had experienced in rating the students' speaking skill. It was done to provide the consistency and fair judgment.

3.7. Data Analysis

In order to find out whether there is a significant effect of students' speaking skill, the researcher examined the students' score using these following steps:

1. Scoring the pretest and posttest

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

3. Calculating the Mean. The researcher calculated the data such as the minimum score and the maximum score to know the mean of the test. Then the researcher made a graphic based on the data. After that, the researcher compared both pretest and posttest to know the improvement. The mean of the test is illustrated through curves as draw as follow.

Figure 3.1. The Example Graphic Line of Picture series
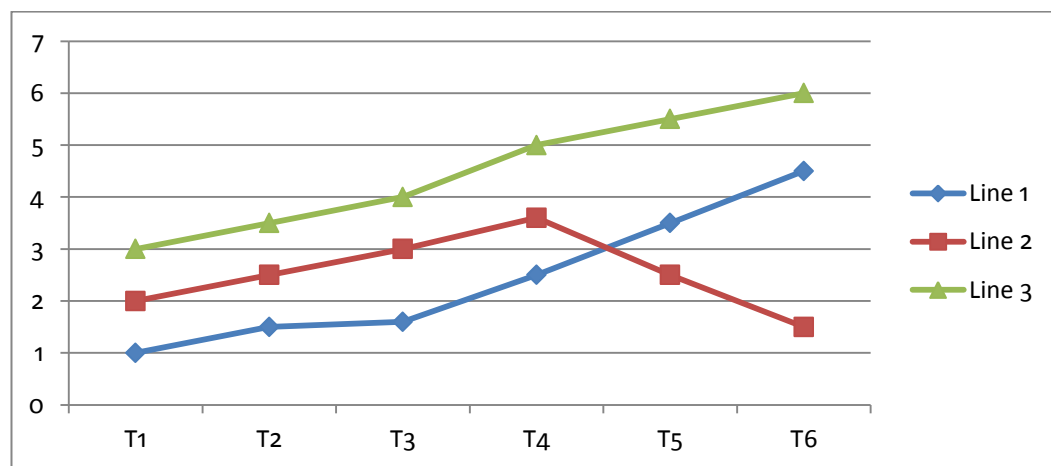
Line 1 indicated that picture series media had a good effect on improving speaking skills. Line 2 indicated that picture series media that was implemented had a negative effect on improving speaking skill since it showed the students' score declined consistently after the treatment. Then, line 3 indicated that there

was no significant difference on students' speaking skill before and after the applying the picture series.

3.8. Hypothesis Testing

Hypothesis of this research is:

$$H_1 = T_{value} > T_{table}$$

$$H_0 = T_{value} < T_{table}$$

H_1: There is a significant difference of students' speaking skill after being taught by using picture series.

H_0: There is no significant difference of students' speaking skill after being taught by using picture series.

This hypothesis is statistically by comparing the mean of both pretest and posttest using excel manually, Pair Sample T-test of SPSS 16 and then made a graph based on the mean score of the test.