IMPROVING SPEAKING SKILL THROUGH THE USE OF SIMULATION TECHNIQUE

Nurviana Hardianty¹, Nadrun², Mukrim³

Abstract

The research was aimed to prove whether the use of simulation technique is effective in improving the students’ speaking skill or not. It was pre-experimental research design. The samples of this research were the eleventh grade students of SMA Alkhairaat Kalukubula and they were selected by using random cluster sampling. The experimental group was XI IPA consisting of 15 students. The instrument of data collection was a test given to the students as pre-test and post-test. The pre-test was used to measure the students’ speaking skill before treatment; and the post-test was used to measure the students’ speaking skill after the treatment. The data gathered through the test were analyzed statistically. The result of data analysis shows that the hypothesis was accepted by regarding to the analysis that t-counted 5.4 is higher than the t-table 1.761. The degree of freedom (df) of the table is 15 – 1 = 14. The level of significance counted is set up at 0.05. It means that the use of simulation technique significantly improves the students’ speaking skill of SMA Alkhairaat Kalukubula.

Keywords: Improving; Speaking Skill; Simulation Technique.

INTRODUCTION

Speaking is used to convey ideas, arguments, opinions, or thoughts to other people by using organs of speech. Speaking skill also can be defined as oral communication that shows how well a speaker is able to arrange the words in order to express his or her thought and can be understood by listener. Byrne (1976:8) states, “Oral communication is a two-way process between the speaker and the listener and involves the productive skill of speaking and receptive skill of understanding (or listening with understanding)”.

The quality level of speaking skill is identified through the three aspects called fluency, accuracy, and comprehensibility (communicativeness). Fluency aspect covers pronunciation and intonation. Accuracy aspect covers grammar, vocabulary choices and appropriateness of the language utterances, while comprehensibility aspect covers the
ability to make information understandable by other people as well as to comprehend other people’s information.

According to Richards (1990), there are some reasons causing English learner poor in speaking skill. They are curriculum do not emphasize on speaking skill, teachers have limited English proficiency, class conditions do not favor oral activities, the English learners have limited opportunities to practice their skill outside, and examination system does not emphasize on oral skill. Therefore, many students in senior high school still have low level in speaking skill or are not fluent to speak because many students are still afraid and nervous in expressing their English orally.

By looking at the statement above, the researcher found some problems at the eleventh grade students of SMA AlKhairaat Kalukubula. First, when the students were going to speak, they took much time to think. Second, they were not confident to speak English directly with their English teacher and their classmates. Third, they were afraid of making mistakes in speaking English. Last, they rarely practice speaking in English. It means that they need more chance to practice it.

Based on the problem above, the researcher was interested in choosing simulations as the teaching technique applied in the research. Simulations are very similar to role-plays but they are more complex. In simulation, students can bring items to the class to create a realistic environment. In this technique, if a student is acting as doctor, she brings a stethoscope to check the patient and so on. Although role play and simulation are quite similar, there are two major distinctions exist between them. A role play includes an audience role, whereas a simulation involves all participants in the action. Moreover, a role play focuses on the effective relationships, while simulation focuses on an outcome.

“Simulation is way of taking the students out the classroom for a while and of showing them how English can be useful for them in certain situation” (Kayi, 2003). According to him, simulation is a method that can encourage thinking and creativity. It means that, students are expected to develop and practice new language and behavior skills by themselves. On the other sides, teachers merely need to supply the materials which are completed with clear information and direction. The roles of teachers only control the students’ work. The teachers are claimed to be very careful to apply this technique because not all students feel easy to pretend to be someone else.

Simulation technique is a structured and preplanned activity designed to stimulate the real world that has rules, scoring, and defined procedures. This activity combines the
characteristics of games (a scored contest in which people abide by a set of rules) and simulation (an imitation of some aspect of reality).

In simulation, the teacher’s role is to manage the simulation, explain the game, maintain the rules, coach (offer advice, prompt) and conduct the debriefing discussion.

Simulation allows students to experience content directly. Players participate in an event rather than experiencing it variously by reading about it. Through this participation, players had a concrete experience that may help them to understand the abstract eventhough through an analogy. Students who had characterized as the “new learners” (those who are new clients to higher education based on their poor performance on achievements tests) were often those for whom high levels of abstraction were difficult. Simulation may provide these students with activities that create motivating, involving, and concrete.

Simulation has advantages. First, it is entertaining, it motivates the students. Second, it increases the self-confidence of hesitant students, because in simulation activities, they will have a different role and do not have to speak for themselves, which means they do not have to take the same responsibility.

The most common view of simulation is that they provide a way of creating a rich communicative environment (a representation of reality) where students actively become a part of some real-world system and function according to predetermined roles as members of that group.

The innate benefits of simulations include:

a. Fulfill students’ need for realism.

b. Increase students (and teacher) motivation, especially for those in EFL situations who might see English as a deferred need at best (Jones, 1982).

c. Dismantle the normal teacher-students relationship so that students take control of their own destiny within the simulation, leading towards “declassrooming” the classroom (Sharrock & Watson, 1985).

d. Reduce anxiety levels which is essential to language development (Dulay, Burt, & Krashen, 1982).

e. Allow teacher to monitor the participants.

Based on the problem that the researcher found at SMA Alkhairaat Kalukubula, the researcher focused on the students’ achievement in fluency and comprehensibility. Then, the researcher formulated the problem statement as follows: Can the use of simulation technique improve speaking skill of the eleventh grade students of SMA AlKhairaart
Kalukubula? It is to verify that simulation technique could improve the speaking skill of the eleventh grade students of SMA Alkhairaat Kalukubula.

**METHODOLOGY**

In this research, the researcher applied pre-experimental research design that using one group of pretest-posttest design. It was designed to implement the use of simulation technique for the eleventh grade students at SMA Alkhairaat Kalukubula in improving the students’ speaking skill. The research design used Woods’ model (2010:304) as follows:

\[ Y_1 \quad X \quad Y_2 \]

Where:
- \( Y_1 \): pretest
- \( X \): treatment
- \( Y_2 \): posttest

The population of this research was the eleventh grade students at SMA Alkhairaat Kalukubula which consisted of two classes. Each class consisted of 19 up to 26 students. The total number of the students was 45 students. In selecting the sample, the researcher applied random cluster sampling. To determine which class became the experimental group, there were some steps that used by the researcher. First of all, the researcher made two pieces of small paper and then wrote the name of each class. After that, the small papers folded and put into a glass. Then the glass was shaken thoroughly and dropped one of them. The name of the class of the fallen paper was the sample of the research. The result was XI IPA as the sample of the research which consisted of 19 students. Based on the title, there were two variables of this research. Best (1981: 59) states “Variables are the condition or characteristics the experimenter manipulates, controls, or observes”. Referring to the title of the research, the researcher found out two variables. They are dependent and independent variables. The dependent variable was the speaking skill, while the independent variable was the use of simulation technique.

In this research, the researcher used oral test as the instrument in collecting the data. The oral test was applied as pre-test and post-test. Pre-test was applied before treatment in order to assess the students’ speaking skill. Post-test was applied after the treatment in order to measure or assess the students’ progress and achievement after doing the treatment, whether the treatment had an influence or not by applying simulation technique.
Pre-test was done by the students before treatment. It tested the students’ fluency and comprehensibility in speaking. In scoring the fluency and the comprehensibility of the students, the researcher used the scoring rubric of speaking which adapted from Heaton. The range of the score is 1 to 6. If they spoke without too great an effort with a fairly wide range of expression, search for words occasionally but only one or two unnatural pauses, they got the highest score. While, they got the lowest score if they were full of long and unnatural pauses, very halting and fragmentary delivery, at times give up making the effort, and very limited range of expression. It is similar to comprehensibility’s scoring system. The students got the highest score if their speaking were easy for the listener to understand speakers’ intention and general meaning, and very few interruptions or clarifications required. Therefore, they got the lowest score if they were hardly anything of what is aid can be understood. Even when the listener makes a greats effort of interrupt the speaker is unable to clarify anything he seems to have said.

Table 1: The Scores Category

<table>
<thead>
<tr>
<th>No.</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>6</td>
<td>90 - 100</td>
</tr>
<tr>
<td>2.</td>
<td>5</td>
<td>80 - 90</td>
</tr>
<tr>
<td>3.</td>
<td>4</td>
<td>60 - 70</td>
</tr>
<tr>
<td>4.</td>
<td>3</td>
<td>40 - 50</td>
</tr>
<tr>
<td>5.</td>
<td>2</td>
<td>20 - 30</td>
</tr>
<tr>
<td>6.</td>
<td>1</td>
<td>0 - 10</td>
</tr>
</tbody>
</table>

(Admitted at SMA Alkhairaat Kalukubula)

After giving the pre-test, the researcher treated them by using simulation as the technique to the experimental group for eight meetings. Each meeting took 90 or 2x45 minutes in order to improve the student’s skill in speaking. After conducting the treatment, the researcher gave post-test to know whether the students’ speaking skill can be significantly improved during the period of treatment given or not.

To know the ability of the students, the researcher firstly computed the individual score by using formula recommended by Arikunto (2002:276):

\[
\sum = \frac{x}{N} \times 100
\]
Where:

\[ \Sigma = \text{standard score} \]
\[ X = \text{sum of correct answer} \]
\[ N = \text{maximum score} \]
\[ 100 = \text{fixed score} \]

The second, the researcher computed the mean score of the students in pre-test and post-test by using formula stated by Woods (2010:109):

\[ X = \frac{\Sigma x}{N} \]

Where:

\[ X = \text{the mean of scores} \]
\[ \Sigma = \text{the sum of scores} \]
\[ X = \text{raw score} \]
\[ N = \text{number of cases} \]

Then, the researcher calculated the mean score of students in each test. Then the researcher computed mean deviation between pre-test and post-test, she used the formula recommended by Arikunto (2006:307) as follows:

\[ Md = \frac{\Sigma d}{N} \]

Where:

\[ Md = \text{mean score} \]
\[ \Sigma d = \text{the total score of deviation.} \]
\[ N = \text{number of students} \]

Next, the writer computed the square deviation by using formula recommended by Arikunto (2006:276) as follows:

\[ \sum X^2 d = \sum d^2 - \frac{(\Sigma d)^2}{N} \]

Where:

\[ \sum x^2 d = \text{sum of squared deviation} \]
\[ N = \text{number of students} \]
Then, to find out the effect of the treatment the writer used a formula recommended by Arikunto (2006:307) as follows:

\[
t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}
\]

Where:
- \( t \) = t-test score
- \( Md \) = mean from pre-test and post-test
- \( \sum x^2 d \) = sum of squared deviation
- \( N \) = Number of students

RESULTS

The researcher conducted the pre-test on June 26\(^{th} \), 2013. During the pre and the post test, there were four students absent. Therefore, there were 15 students who joined the pre-test and the post-test. In both pre-test and post-test, the researcher applied the formula proposed by Woods as stated in the methodology.

In the pre-test, only 1 student got score 63. It is the highest score of them. While, 14 students got score lower than 63. Totally, the standard score of the students was 532. After getting the total score of the students, the researcher computed the students’ mean score. The mean score of the students was 35.4.

The researcher then scored the students’ post-test after conducting the treatment. After doing the computation, it was found that the highest score of the post-test was 88 and the lowest score was 20. Most of the students got the higher scores then their scores in pre-test. Totally, the standard score of the post-test was 855. The researcher then calculated the mean score of the post-test. The mean score of the students’ post-test was 57.

From the calculation above, it showed that there was a progress which made difference between the students mean score in pre-test and post-test. The students’ mean score in post-test (57) was higher than students mean score in pre-test (35.4). Those showed that students’ speaking skill was significantly improved after the treatment.

After calculating the mean score of the students’ pre-test and post-test, the researcher computed the deviation and the square deviation of the students’ score in pre-test and post-test by using the formula proposed by Arikunto as stated in the methodology. The computation of the students’ mean deviation was presented as follows:
Table 2: Deviation of the Pre-Test and Post-Test

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Standard Score</th>
<th>Deviation</th>
<th>$d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-test (x)</td>
<td>Post-test (y)</td>
<td>$d = (y - x)$</td>
</tr>
<tr>
<td>1.</td>
<td>FA</td>
<td>48</td>
<td>88</td>
<td>40</td>
</tr>
<tr>
<td>2.</td>
<td>Z</td>
<td>60</td>
<td>68</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>RP</td>
<td>48</td>
<td>63</td>
<td>15</td>
</tr>
<tr>
<td>4.</td>
<td>SP</td>
<td>63</td>
<td>88</td>
<td>25</td>
</tr>
<tr>
<td>5.</td>
<td>FR</td>
<td>48</td>
<td>60</td>
<td>12</td>
</tr>
<tr>
<td>6.</td>
<td>MO</td>
<td>40</td>
<td>68</td>
<td>28</td>
</tr>
<tr>
<td>7.</td>
<td>RN</td>
<td>23</td>
<td>65</td>
<td>42</td>
</tr>
<tr>
<td>8.</td>
<td>NO</td>
<td>10</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>9.</td>
<td>R</td>
<td>10</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>10.</td>
<td>AN</td>
<td>18</td>
<td>43</td>
<td>25</td>
</tr>
<tr>
<td>11.</td>
<td>F</td>
<td>13</td>
<td>45</td>
<td>32</td>
</tr>
<tr>
<td>12.</td>
<td>AS</td>
<td>23</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>NA</td>
<td>40</td>
<td>43</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>SS</td>
<td>48</td>
<td>63</td>
<td>15</td>
</tr>
<tr>
<td>15.</td>
<td>MR</td>
<td>40</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>532</td>
<td>855</td>
<td>323</td>
</tr>
</tbody>
</table>

The mean deviation score of the students was 21.5. After getting the mean deviation, the researcher then computed the sigma square deviation. The sigma square deviation score was 3347.7. After having the sum of square deviation, the researcher needed to analyze the data statistically in order to know the significant difference of the pre-test and post-test score by using t-test formula. In this step, the researcher got the t-test score was 5.4.

The result of the data analysis showed that t-counted was 5.4. The results of the data analysis showed that there was a significant difference between the pre-test and post-test mean score. By applying 0.05 level of significance and $N(N-1)$ degree of freedom (df), then compared the value of the t-counted (5.4) with the value of the table (1.761) by applying degree of freedom (df) = $N(N-1)$ where (df) = 15 (15-1). Since the t-counted (5.4) is higher than t-table (1.761), researcher concluded that the use of simulation technique was effective to improve the students` speaking skill of the eleventh grade students of SMA Alkhairaat Kalukubula.
DISCUSSION

Based on the result of students’ pre-test, it can be seen that none of the students got the highest score. 93% students got score lower than 60 and only 7% students got score higher than 60. It happened because when they got the pre-test, they got confused to answer the questions orally. They took much time thinking because they were not confident and afraid of making a mistake in using English. It was surprising because the students have learnt speaking since they were in the tenth grade.

The results of post-test were different from the pre-test. The researcher found that the students could speak more fluently. Their confidences were increased and they were not afraid of sharing their ideas. They did not speak with full of long and unnatural pauses anymore. Also, the students could understand what the speaker says easier. In this test, the students’ score increased from the pre-test to the post-test. 47% students got score lower than 60 and 53% students got score higher than 60.

By comparing the result of pre-test and post-test, the researcher concluded that the use of simulation as a technique in improving the students’ speaking skill was effective because there was a progress in students’ score. By looking at the progress that was obtained, it proves that simulation can improve the students’ speaking skills. In addition, Yuwono (2013), in her research, states that the use of simulation technique was successful to improve student’s speaking skill. It can stimulate and motivate the students to speak actively in English. It also can enhance the student’s activeness in joining the class. They become more active in asking questions, answering questions, paying attention, and willingness to speak in front of the class. In short, simulation technique was effective in developing the students’ speaking skill.

CONCLUSION AND SUGGESTION

After discussing and analyzing the data, the researcher draws some conclusions. Firstly, the use of simulation technique is effective in improving the students’ speaking skill. It can be seen from the result of the data analysis, in the pre-test the result was 35.4 while in the post-test the result increased to 57. Obviously, it indicated that the speaking skill of the eleventh grade students of SMA AlKhairaat was improved. The students could speak more fluently and understand what the speaker says easily. Secondly, there was a significant difference between the mean values of pre-test and post-test. It was proved since $t_{counted}$ value (5,4) was higher than $t_{table}$ value (1.761). It means that the research hypothesis was accepted.
Related to the above conclusion, the researcher provides some suggestions for the improvement of teaching and learning process by using simulation technique. The suggestions are the English teachers are suggested to use simulation as the technique in teaching speaking skill to develop the students’ speaking skill, create a comfortable atmosphere in teaching and learning process, and provide real object which is appropriate with the topic of the lesson as the learning media.

REFERENCES


