# AN EXPERIMENTAL STUDY OF THE IMPLEMENTATION OF THE SIMULATION TECHNIQUE IN TEACHING SPEAKING

**Ana Dewi Saputri, Nanik Supriani**
Universitas Sarjanawiyata Tamansiswa; Universitas Sarjanawiyata Tamansiswa
putricubiie@gmail.com; naniks_2000@yahoo.com

**Abstract**
Based on observation, the writer identifies the following problems at the seventh grade students of SMPN 1 Samigaluh, the researcher found some factors that influence student's speaking skill. Thus, this study investigates about the simulation technique in the process teaching-speaking. It used an experimental design involving 32 students in the experimental group and control group. The instrument used was the speaking test (pre-test and post-test) that was given to both groups. The experimental group was given the treatment using simulation technique, while the control group used conventional teaching. Based on the result, the researcher calculate using SPSS that shows $sig/p = 0.00$. It was smaller than 0.05 ($0.02 < 0.05$), so there is significant difference between students' speaking skills before and after using simulation to the seventh grade students of SMP N 1 Samigaluh in academic year 2017/2018. Moreover, the simulation technique could help them to improve their speaking ability.

**Key words**: *Speaking skill, Simulation technique and Experimental study*

## Introduction

According to Richards (2008)as foreign language learners, we should master speaking skill inEnglish as our priority. In other words, speaking skill is the important role in teaching processwhere the speakers can lead the listener to gain the message in their conversation clearly and the listener can understand the meaning of the words, but there are some problems. The first problems come from the teacher. The teacher should apply the various technique and gave the media, but the teacher used the traditional method. The teacher only used the book and the blackboard as the media so the researcher thought that it was not develop the process teaching in the class, the second problem related to the students when they learned speaking English. The students are not confident with their self. They are confused when they say or express their ideas using English Language, the third problems related to the process of teaching and learning Speaking English. The teacher just explained the material than their students to discuss but their students were not practice one by one in the class so it made their students to be passive when they processed teaching-learning speaking.

In order to solve the problems, the researcher had had one alternative technique that was simulation technique. The simulation technique is the students' learning style that gives advantages to improve their speaking skill and it concerns to speaking skill. The teacher can prepare the activities with the simulation technique in the classroom involving complex interaction between group and individuals based on simulation of real-life and experience (Brown, 2000: 135).

**Theoretical review**

    **1. Speaking**

        According to Lynne Cameron (2001: 40) speaking is the active use of the language to express meanings so that other people can make sense of them. Thus, speaking is the productive oral / aural that it consists of producing systematic verbal utterance to convey the message or the meaning.

        Brown (2004:271) describes six categories of speaking skill area. Those six categories are as follows:*Imitative*is focusing on pronunciation, *Intensive*is the students' speaking performance that is practicing some phonological and grammatical aspects of language, *Responsive* is interaction and test comprehension, *Transactional (dialogue)*is conveying or exchanging specific information, *Interpersonal (dialogue)is* maintaining social relationships than for the transmission such as; interview, role play, discussions, conversations, and games.*Extensive (monologue)*extended monologues in the form of oral reports, summaries, and short speeches.

    **2. Teaching Speaking**

        According to Nunan David (2003: 54-56) Speaking is important for language teachers to understand the units of language and how they work together. Give students practice with both fluency and accuracy, plan speaking tasks that involve negotiation for meaning, design classroom activities between transactional and interactional,The teacher activities in the classroom will have to speak the target language in both transactional and interactional and can give motivation to the students. It is used to the technique.

**3. Teaching Speaking using Simulation**

Adapted from Sam (2006), the procedures of teaching speaking through simulation are as follows:

a) Building Knowledge of Filed (BKOF)

    The teacher teaches some vocabularies using the picture related to the topic, the teacher gives first model how to pronounce the words then the students try to repeat of the words, practice grammatical patterns relevant to the topics or text. Then the teacher drills grammatical patterns to the students, and the last the teacher builds up and extent vocabulary relevant to the topic using task fills the blank or arranges the sentences.

b) Modeling of Text (MOT)

    The teacher introduces a model of the genre to the classroom, the teacher shows a modeof the text to the students in order to be imitated how to read the text,then the students listen to a listening text,and the teacher explains about the content of the text.

c) Joint Construction of Text (JCOT)

    The emphasis of this stage, the students can do role play in pairs. The emphasis of this stage the students can do role play / simulation in pairs.

d) Independent Constructions of Text (ICOT)

    The teacher gives the students homework to collect the picture about the next meeting and then, the teacher commands to make a simple dialogue about the topics about.

**Method**

The method used for this study belongs to classical experimental design that involves two randomized sample group, pre-test and post-test (make dialogue directly without text) for both groups and a different treatment for each group. This is design can be represented by following (Sugiyono, 2013: 223):

| | | | | |
|---|---|---|---|---|
| *Experimental group* | *: R* | *O₁* | *X₁* | *O₂* |
| *Control group* | *: R* | *O₁* | *X₂* | *O₂* |

*Where:*
*R*      *: Random Sample*
*O₁*     *: Pre-Test*
*X₁*     *: Treatment using simulation Technique*
*X₂*     *: Treatment using conventional teaching*
*O₂*     *: Post-Test*

The writer conducted the research at SMP N 1 Samigaluh. It is located in Dekso-Plono Street, Clumprit, Gerbosari, Samigaluh, KulonProgo, D. I. Yogyakarta. The implementation of this research carried out in the month of October 24th until November 23th, 2017 in the academic year of 2017 / 2018. There are three classes of seventh grade consisting class A, B, and C, but two classes were taken randomly to be subject of the research. They are "class A" as experimental class and "class B" as control class.

**Findings and Discussion**

In this chapter, this study covers the result of data analysis and the discussion of the research finding. The researcher did the data analysis by using SPSS.The researcher classified the categories frequency distribution by Suharto (2008:16). To apply this formula, the researcher calculated the *ideal mean and the ideal standard deviation.*

$$\textbf{Ideal mean} = \frac{(maksimum\ score+minimum)}{2}$$
$$= \frac{25+5}{2}$$
$$= \textbf{15}$$
$$\textbf{Ideal SD} = \frac{(maximum\ score-ideal\ mean)}{3}$$
$$= \frac{(25-15)}{3}$$
$$= \textbf{3.3}$$

1. Pre-test
   a. *The result of Pre-Test of Experimental Class (Class A)*

| *Experimental Class* | *Number of Students* | *Minimum score* | *Maximum Score* | *Mean* | *Std. Deviation* |
|---|---|---|---|---|---|
| **VII A** | **32** | **10** | **18** | **12.5** | **1.70389** |

Based on table 7 above, it showed that mean **(M)** of pre-test of experiment class was **12.5** then standard deviation **(SD)** was **1.70389**. The maximum score was **18** and the minimum score was **10**. It shows that frequency category of experimental group's pre-test score on Students' speaking skill:

| Interval | Categories | Frequency |
|---|---|---|
| 21.6  - 24.8 | *Excellent* | 0 |
| 18.3  - 21.5 | *Very Good* | 0 |
| 15.00 - 18.2 | *Good* | 5 |
| 12.7  - 14.9 | *Fair* | 9 |
| ***9.4    - 12.6*** | ***Poor*** | ***18*** |
| 6.1   - 9.3 | *Very Poor* | 0 |
|  | TOTAL | 32 |

Based on the categories above, the mean score of experimental group pre-test is **12.5.** It can be said that the students' speaking skill of experimental *is poor at* scale *9.4-12.6* before they were given treatment by using simulation technique.

b. *The Result of Pre-test of Control Class VII B*

| Control Class | Number of Students | Minimum score | Maximum Score | Mean | Std. Deviation |
|---|---|---|---|---|---|
| **VII B** | **32** | **8** | **16** | **10.1** | **1.64120** |

The result of pre-test of control group shows that *Table 8* showed the result of pre-test of the control group. The mean **(M)** of pre-test control class was **10.1** and standard deviation (SD) was **1.6.** The highest score was **16** and the lowest of pre-test was **8**. To show frequency distribution of the pre-test score on speaking skill, it can look at the table:

| Interval | Categories | Frequency |
|---|---|---|
| 21.6  - 24.8 | *Excellent* | 0 |
| 18.3  - 21.5 | *Very Good* | 0 |
| 15.00 - 18.2 | *Good* | 1 |
| 12.7  - 14.9 | *Fair* | 1 |
| ***9.4    - 12.6*** | ***Poor*** | ***16*** |
| 6.1   - 9.3 | *Very Poor* | 14 |
|  | TOTAL | **32** |

Based on the categories above, **the mean** score of control group's pre-test was **10.1**. It can be said that the students' speaking skill of experimental study ***was poor at scale 9.4-12.6*** before they were given treatment by conventional teaching.

2.  Post-Test
a.  *The Result of Post-test in Experimental Class*

| Experimental Class | Number of Students | Minimum score | Maximum Score | Mean | Std. Deviation |
|---|---|---|---|---|---|
| **VII A** | **32** | **16** | **24** | **18.5** | **1.7** |

Table showed that the total number of the students who belong to experimental class was **32** students. From the table above, it can be concluded that mean **(M)** from post-test control class was **18.5** and standard deviation **(SD)** was **1.7**. The highest post-test score of the experimental class was **24**.

The lowest score of the present was **16**. It showed that frequency category of experimental group's post-test score on Students' speaking skill.

| Interval | Frequency | Categories |
|---|---|---|
|  |  |  |
| 21.6  - 24.8 | 1 | Excellent |
| **18.3  - 21.5** | **13** | **Very good** |
| 15.00 - 18.2 | 18 | Good |
| 12.7  - 14.9 | 0 | Fair |
| 9.4    - 12.6 | 0 | Poor |
| 6.1    - 9.3 | 0 | Very poor |
| TOTAL | 32 |  |

Based on the categories above, In conclusion, the mean score of experimental group's post-test was **18.5**. It can be said that the students' speaking skill of experimental study was **very good** at scale **18.3-21.5** after they were given treatment by GBA-simulation technique.

b. *The Result of Post-Test in Control Class*.

| Control Class | Number of Students | Minimum score | Maximum Score | Mean | Std. Deviation |
|---|---|---|---|---|---|
| **VII A** | **32** | **15** | **21** | **16.0** | 1.5 |

From the data above, it shows that there were **32** students of the control class. The mean **(M)** of post-test control class was **16.0** and standard deviation **(SD)** was **1.5**. The highest post-test score of the experimental class is **21**. The lowest score of the present was **15**. It shows that frequency category of control group's post-test score on Students' speaking skill:

| Interval | Frequency | Categories |
|---|---|---|
|  |  |  |
| 21.6  - 24.8 | 0 | Excellent |
| 18.3  - 21.5 | 2 | Very good |
| **15.00 - 18.2** | **28** | **Good** |
| 12.7  - 14.9 | 2 | Fair |
| 9.4    - 12.6 | 0 | Poor |
| 6.1    - 9.3 | 0 | Very poor |
| TOTAL | 32 |  |

**The mean** of control group's post-test was **16.00**. It can be said that students speaking skill of control group*were good categories* at scale *15.00-18.2* after they were given treatment by using conventional teaching from the teacher.

There are two steps of data analysis proposed by Sugiyono (2013: 223) as follows:

1) The first step is data analysis to see the difference between pre-test of two classes. Hopefully, there is no significant difference between pre-test and post-test of two classes.
2) To test hypothesis which is proposed, the data analysis is to see difference between post-test of two treatments.The result t-test was described below.

| | Levene's Test equally of variance | | 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 |
| Var00001 Equal variane asemsed | 0.23 | .811 | 5.679 | 62 | **.000** | 2.37500 | .4182 | 1.53901 | 3.210 |
| Equal variane not assumed | | | 5.679 | 61.9 | **.000** | 2.37500 | .4182 | 1.53899 | 3.211 |

(a) *Difference of Pre-test of experimental and control group*
From the table above it can be concluded that there was a significant difference between pre-test of experimental group and control group. It means that experimental group same level before giving treatment.

(b) *Different from Post-Test of Experimental Class and Post-Test*
To know the result of their treatment, there was significant between simulation technique and conventional teaching. The researcher counted t-test from their post-test score. The result of post-test was explained below:

| | Levene's Test equally of variance | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sig. | T | Df | Sig. (2-tailed) | Mean difference | Std. Error Difference | 95 % Confidence interval of the difference | | |
| | | | | | | | Lower | Upper | |
| Var00001 Equal variane asemsed | .659 | 6.034 | 62 | .000 | 2.43750 | .40396 | 1.63000 | 3.24500 | |
| Equal variane not assumed | | 6.034 | 61 | .000 | 2.43750 | ..40396 | 1.62980 | 3.24520 | |

The table 14 showed the level of significance which degree of freedom (**df**) was 62, it got Sig (2-tailed) was 0.000, while p-value was 0.05. It means that Sig. (2-tailed) calculated was higher than 0.05 (0.00 > 0.05) then (Ho) was rejected and (Ha) is accepted. There was a significant difference between the post-test of experimental and the post-test of the control group.

(c) *Post-Test Experimental was better than Post-Test Control Group.*

The writer found out which class is better based on the mean. The mean score of the class of experimental class was 18.5. It was the higher than control group. The mean score of the class of control class was 16.0. It was lower than experimental group.

Groups are compared between experimental group and control group. It was discussed that the experimental class to much better than the control group. Students who are taught by GBA- Simulation technique learn better than conventional teaching. It can be seed based on the result of the post-test score

## Conclusion

According to the findings and discussion in the previous chapter, it is concluded that simulation technique is effective to improve students' speaking skill, especially in performing adjacency pair dialogue to the seventh graders of SMP N 1 Samigaluh. It can be drawn from the result of means improvement between the pre-test and the post-test in the experimental group and the control group.It can be drawn from the result of means improvement between the pre-test and the post-test in the experimental group and the control group.

1. Describing the students' speaking ability in conventional teaching as a control group. Based on the result of post- test, it showed that the students speaking skill of contol class using conventional teaching were good categories.
2. Describing the students' speaking ability of GBA applying simulation technique as an experimental group, it can be seen based on the result that the students of  GBA applying simulation technique were very good categories.
3. Describing the difference between experimental group(taught by using GBA applying simulation technique) and control group (taught by using conventional teaching) based on the result of the mean, there was the significant difference between students skill before and after using simulation technique to seventh students of SMP N 1 Samigaluh in academic year 2017/ 2018.
4. The mean improvement of experimental group was higher, so the treatment for the experimental group especially GBA-Simulation Technique was better than the treatment for the control group using conventional teaching. Then, there was a significant difference between the students who have been taught using GBA-Simulation Technique and the ones using conventional teaching. Hypothesis null ($H_o$) was rejected and the hypothesis alternative (Ha) was accepted.

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