



The Effect of Role-Play and Brainstorming Technique on Students' Speaking Achievement

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Abstract

The objective of the study is to find out the significant effect of using Brainstorming technique and Role-Play technique on students' speaking competence. In this research, the researcher used the experimental design. The population of this research was the ninth-grade students of SMP Negeri 1 Sunggal, Deli Serdang and the 60 of them were taken as the sample. The sample was obtained by random sampling technique. The data of the study were the students' score in speaking. The data of this study were obtained from the recording of students' works which were transcribed onto students' worksheets. The data were analyzed by t-test formula. The calculation showed that t-observed (8.19 by applying Brainstorming technique and 14.5 by applying Role-Play technique) is higher than t-table (1.671) at the level significance (0.05) and df (38). Alternative hypothesis (Ha) is accepted. It shows that teaching speaking by applying Brainstorming technique and Role-Play technique affected the students' speaking achievement.

Key Words :
Effect; Brainstorming,
Role-Play; Speaking

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh yang signifikan dari penggunaan teknik Brainstorming dan teknik Role-Play pada kompetensi berbicara siswa. Dalam penelitian ini, peneliti menggunakan desain eksperimen. Populasi dalam penelitian ini adalah siswa kelas IX SMP Negeri 1 Sunggal Deli Serdang dan diambil sampelnya sebanyak 60 orang. Pengambilan sampel dilakukan dengan teknik random sampling. Data penelitian ini adalah skor siswa dalam berbicara. Data penelitian ini diperoleh dari rekaman hasil karya siswa yang ditranskrip ke dalam LKS. Data dianalisis dengan rumus uji-t. Hasil perhitungan menunjukkan bahwa t-hitung (8,19 dengan menerapkan teknik Brainstorming dan 14,5 dengan menerapkan teknik Role-Play) lebih tinggi dari t-tabel (1,671) pada taraf signifikansi (0,05) dan df (38). Hipotesis alternatif (H_a) diterima. Ini menunjukkan bahwa pengajaran berbicara dengan menerapkan teknik Brainstorming dan teknik Role-Play mempengaruhi prestasi berbicara siswa.

Introduction

English is one of the international languages that is widely used in the world. As a language which is used by more than a half of population in the world, English holds the key as an international language. English is a tool of communication among people of the world to get trade, social culture, science, and technology goals (Sinurat and Herman, 2019). Moreover, English competence is important in career development, therefore students need to understand and use English to improve their knowledge to face the global competition (Manullang et. al., 2022).

Realizing the growing demand of English as an international means of communication, it is reasonable that our government places English as an important subject in our education system because of its importance, it is taught in all formal schools' degrees, starting from elementary school up to universities (Sirait et. al., 2020). English is also taught in courses as an informal school. English learning is very important for the students, because to master English means that students can use it orally and also in written form.

In learning English as a foreign language, the students have to master the four skills of language, they are listening, speaking, reading, and writing. Students need to know the four

skills and they also should master speaking because it is one of the most important elements in the four language skills.

Speakers talk in order to have some effects from their listener. According to Brown (2004:140), speaking is a productive skill that can be directly and empirically observed, those observations are invariably colored by the accuracy and effectiveness of a test-taker's listening skill, which necessarily compromises the reliability and validity of an oral production test. The instructional process was teacher-centered but now the shift has taken place and now it is student-centered. In the instructional process, a teacher should give much time for the students to take focus in speaking.

On the other hand, in the process of teaching speaking, the students think that speaking is very difficult to be practiced. When the teacher asks them to express their opinions or ideas orally, most of them are afraid of making mistakes. This situation makes them bored to take part in speaking activities and because of this they get low score. The teacher should help the students to overcome this problem by motivating them to speak out. For this reason, the teacher should use effective teaching-speaking technique that encourage students to take part actively in the class. The teaching-learning process has to involve not only the teacher but also the students. To help the students solve this problems, the teacher should motivate them and create the most effective way to stimulate them, so they will be more interested in practicing their speaking. Meanwhile, the teacher must apply an appropriate technique so that they are more motivated.

There are four integrated skills in studying English, they are speaking, listening, reading, and writing. But generally we find speaking is the hardest among the four skills. Unlike reading, writing, and listening. What makes speaking is harder than the other skills is that speaking happens in a real time and people understand based on what we have said. Speaking needs to be developed and practiced independently. That is why they must know the grammar and some vocabularies and make sentences which should be pronounced properly, then they are able to speak it. It means that speaking needs people's background knowledge before being able to speak. Fulcher (2003:22-23) say that speaking is an ability that is taken for granted, learned as it is through a process of socialization through communicating.

Thornbury (2004:111) gave comment that practice is the best thing to learn. When we were at school, we were in a lot of contact with English, but when going out to work to speak the language, we were so scared. Studying English at school should enable the students to communicate in English, either it is as a communication tool in formal situation or informal

situation. Therefore, language user can differ when they use formal language or informal language.

Based on the writer's experience during teaching English at SMP Negeri 1 Sunggal, the writer discovered that most students are afraid of speaking English, and most of the time they lost their ideas during speaking and obviously afraid of making mistakes. Some of the students are not confident in speaking English, this perhaps are caused by lack of motivation related to the engagement during speaking session and it does not give anything to their improvement. In accordance with the previous experience before, the writer also has conducted the previous study (pre-test) at the same school on February 21, 2018 and the result of the study was 66,7. The number of the students was 28 persons. Based on the data that the writer got, it showed the students' speaking achievement was still low, and the writer gave appropriate techniques to improve their speaking competence. The writer applied Role-Play Technique and Brainstorming Technique.

The writer chose those two techniques to his English learners because they gave them appropriate practice for speaking and made the process of studying more fun. Besides, the students had many opportunities to express their ideas or opinions directly which can improve their speaking achievement. Through those two techniques, the students will be more active in speaking because they try to act out the topics, thus, it can improve the students' speaking achievement. This study will be conducted to find out the effect of Role-Play Technique and Brainstorming Technique on the students' speaking achievement.

Method

1. Research Design

Arikunto (2010:160) stated that research design is the researcher's way to collect the data. Research design can be divided into two types, namely qualitative research and quantitative research. According to Creswell (2003:18), qualitative research is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives or advocacy/participatory perspectives (Silalahi et. al., 2021). Meanwhile, quantitative research is one in which the investigator primarily uses postpositivist claim for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions use of measurement and observation and the test of theories), employs the strategies of inquiry, such as the experiments and surveys and collects data on predetermined instruments that yield statistical data (Lumbantobing et. al., 2020).

This study is conducted by using experimental quantitative research that the researcher paid more attention to the students' speaking achievement during teaching learning process. The research was divided into two different groups, namely Experimental group and Control group. The experimental group is a group that receives the treatment by using Role-Play technique and Brainstorming technique, while the control group is a group that receives no treatment at all. The researcher used experimental research, because he is going to find out the effect of Role-Play technique and Brainstorming technique on students' speaking achievement. The research design can be seen, as follows:

Table 1. Research Design

Group	Pre-test	Treatment	Post-test
Experimental	✓	Using Role-Play technique & Brainstorming technique	✓
Control	✓	Using no technique at all	✓

2. Population and Sample

According to Fraenkel and Wallen (2009:90), the population is the larger group to which one hopes to apply the result. While sample is the group on which information is obtained. Sample is a statistical method of drawing representative data by selecting people because of the ease of their volunteering or selecting units because of their availability or easy access (Herman et. al., 2020). The advantages of this type of sampling are the availability and the quickness with which data can be gathered. The disadvantages are the risk that the sample might not represent the population as a whole, and it might be biased by volunteers. For example, a study to determine the average age and sex of gamblers at a casino that is conducted for three hours on a weekday afternoon might be overrepresented by people of working age.

a. Population

The population of this research was the students who are on Grade IX SMP Negeri 1 Sunggal Deli Serdang in the academic year 2018-2019. The total number of the class were three classes. They were IX-1, IX-2, and IX-3. The number of students of IX-1 is 20 students, IX-2 is 20 students, and IX-3 is 20 students.

b. Sample

One of the most important steps in the research process is the selection of the sample of individuals who participated (be observed or questioned). Fraenkel and Wallen (2009:90)

referred sample to the process of selecting those individuals (Sinaga et. al., 2020). Therefore, from the 96 students of Grade IX, the researcher took 60 students as samples. The sample was taken from IX-1 and IX-3 as the Experimental Classes, and IX-2 as the Control Class. Thus, the number of students for IX-1 was 20 students, IX-2 was 20 students, and IX-3 was also 20 students.

3. Instrument of Data Collection

The data of this study was collected by using subjective test. The test was speaking test. The researcher tested the components of speaking competence the students have. In this study, the media used to collect the data was mobile phone or digital camera. The researcher asked the students to speak, and the researcher recorded it. The words from the students were transcribed on the students' worksheets. The researcher analyzed the speaking of each student.

4. Technique of Data Collection

The study procedure was started by giving pre-test to the students. The students' score in pre-test was the measurement of their competence in speaking. The pre-test was applied before giving treatment.

After getting the students' score in pre-test, the researcher gave treatment to the students in order to improve the score. The procedure of giving treatment was started by giving motivation and brainstorming about the material. After that, the researcher gave explanation to the students about speaking. Then, the students were divided into some groups and asked to give arguments relating to the material. After discussing, the students practiced their speaking.

The researcher ensured the students have understood about how to speak well, finally the students were given post-test. They came to the real speaking activity. During the speaking process, the researcher checked and took the score of each student. The result of this post-test was used to see the effect of Role-Play Technique and Brainstorming Technique on students' speaking achievement.

a. Pre-test

Before talking about the pre-test of this study, Creswell (2012:297) viewed that a pre-test provides a measure on some attribute or characteristic that you assess for participants in an experiment before receiving the treatment (Ivantara et. al., 2020). So, it was given to the students before the researcher gave the treatment. The purpose of this pre-test is to

find out the homogeneity in the mean score of the students. In conducting the pre-test, the students will be asked to answer some questions based on their understanding about speaking, and then the students' score was counted according to the criteria of assessment.

b. Treatment

The treatment was conducted to the experimental group. The experimental group was taught by applying Role-Play Technique and Brainstorming Technique.

Table 2. Activities in Role-Play Technique

No.	Activities	Time Allotment
1.	<ol style="list-style-type: none"> 1. The teacher introduced Role-Play Technique to the students. 2. The teacher asked the students to respond about Role-Play Technique. 3. The teacher and the students made the conclusion about Role-Play Technique. 	2 x 40 Minutes
2.	<ol style="list-style-type: none"> 1. The teacher reviewed about the previous lesson. 2. The teacher asked the students' opinion about Role-Play Technique. 	2 x 40 Minutes
3.	<ol style="list-style-type: none"> 1. The teacher asked every student to apply Role-Play Technique and share the material. 2. The teacher asked the students to do it with group. 	2 x 40 Minutes

Table 3. Activities in Brainstorming Technique

No.	Activities	Time Allotment
1.	<ol style="list-style-type: none"> 1. The teacher introduced Brainstorming Technique to the students. 2. The teacher explained how to apply Brainstorming Technique. 3. The teacher and the students made the conclusion about Brainstorming Technique. 	2 x 40 Minutes

No.	Activities	Time Allotment
2.	1. The teacher reviewed about the previous lesson. 2. The teacher showed the example group of Brainstorming Technique.	2 x 40 Minutes
3.	1. The teacher divided the students into groups. 2. The teacher gave each group the material. 3. The teacher asked to every group to tell and share based on the material. The situation is like conducting the presentation.	2 x 40 Minutes

c. Post-test

After giving the treatment to the students, the researcher gave test to class which one by teaching in Role-Play Technique group and Brainstorming Technique group, then their scores were collected.

The test was called as post-test. According to Creswell (2012) in Barus et. Al. (2020), post-test is a measure on some attribute or characteristic that is assessed for participants in an experiment after a treatment (Rajagukguk et. al., 2020). In our example, this would be assessing the students' attitudes towards smoking at the end of the semester after the experimental treatment.

5. The Technique of Data Analysis

The development of the students' score for each test were analyzed statistically by using t-test formula. It was used to find out the significant effect of using Role-Play technique and Brainstorming technique on students' speaking achievement at ninth grade at SMP Negeri 1 Sunggal Deli Serdang. The t-test formula according to Ary et.al. (2010:172), namely:

$$t = \frac{x_1 - x_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{\bar{I}(n)_{1+n_2-2}}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where:

x_1 : Mean of Experimental Class

x_2 : Mean of Control Class

Σx_1 : Standard Deviation of Experimental Class

Σx_2 : Standard Deviation of Control Class

n_1 : Total Sample of Experimental Class

n_2 : Total Sample of Control Class

After the writer got all the students' scores from the test, he found the mean and standard deviation (Fraenkel and Wallen, 2009:195) by using formula as follows:

Calculation of the Mean:

$$\bar{x} = \frac{\Sigma X}{N}$$

Calculation of Standard Deviation:

$$SD = \sqrt{\frac{\Sigma(\bar{x})^2}{n}}$$

Where:

SD : Standard Deviation

n : Number of Samples

x : Scores

Results and Discussion

1. Results

After collecting and analyzing the data, it was found that the lowest score of pre-test in control class was 55 and the highest score was 85. Then, after the post-test was given, the lowest score was not significantly improved, 55 to 55 ($55 - 55 = 0$). It means that the difference of the score was 0. The highest score was neither significantly improved, 85 to 85. It shows that there was no difference of the highest score in pre-test and post-test. The mean score of pre-test was 70, and the post-test was 72 ($72 - 70 = 2$). It can be concluded that the students' scores in control class, which were taught without neither Brainstorming technique nor Role-Play technique was not significantly different or improved.

The lowest score of pre-test in experimental class by applying Brainstorming technique was 60 and the highest score was 80. After post-test was done, the lowest score was 65 and the highest score was 85. The lowest score improved 60 to 65 ($65 - 60 = 5$), the

highest score improved 80 to 85 ($85 - 80 = 5$). The mean of pre-test was 74, and the mean of post-test was 79 ($79 - 74 = 5$). It can be concluded that the students' scores in experimental class which were taught by applying Brainstorming technique was significantly different, since $5 > 2$.

The lowest score of pre-test in experimental class by applying Role-Play technique was 60 and the highest score was 80. After post-test was done, the lowest score was 85 and the highest score was 95. The lowest score improved significantly 60 to 85 ($85 - 60 = 25$), the highest score improved 80 to 95 ($95 - 80 = 15$). The mean of pre-test was 74, and the mean of post-test was 91 ($91 - 74 = 17$). It can be concluded that the students' scores in experimental class which were taught by applying Role-Play technique was significantly different, since $17 > 2$.

2. Discussion

The purpose of this research is to know how that applying Brainstorming technique and Role-Play technique have significant effect on the students' speaking ability. Relating to the purpose of this research, the researcher applied the techniques and the result of the research found that applying Brainstorming technique and Role-Play technique have significant effect on the students' speaking ability. There was different effect in applying conventional technique and using Brainstorming technique and Role-Play technique. The researcher presented the data by using tables in section findings. The tables showed the result of the research. In the tables, the researcher showed the students' scores in control class and experimental class. The students' scores in control class can be seen in pre-test and post-test, and then the students' scores in experimental class by applying Brainstorming technique and Role-Play technique can also be seen in the tables. The researcher separated the tables of control class, Brainstorming technique class, and Role-Play technique class. Based on the data above, applying Role-Play technique had more significant effect on the students' speaking achievement in teaching speaking at SMP Negeri 1 Sunggal, Deli Serdang. It can be seen from the result of the study.

Role-Play (dramatization) helps to bring the language into life, and to give them some experiences of its uses as a means of communication. In applying Brainstorming technique, the students developed greater creativity and were encouraged to participate in the learning activities. Besides, it increased the students' interaction and socialization.

In conducting the research, the researcher applied two major steps, they were pre-test and post-test. In pre-test, the researcher asked the students to work in pairs, have a dialogue

about the selected topic, then record it. Next, the researcher took the score on the adjudication sheet from the students' recording. After getting the score of the students' pre-test, the researcher gave the solution by applying techniques. The post-test was given after teaching the students with Brainstorming technique and Role-Play technique. The students' works were transcribed onto the students' worksheets. The worksheets were scored by the researcher, got the students' score, and then it would be known that applying Brainstorming technique and Role-Play technique affected the students' speaking achievement.

After conducting the research, the researcher stated that using Brainstorming technique and Role-Play technique are appropriate to be applied by the English teachers at SMP Negeri 1 Sunggal, Deli Serdang, in teaching speaking. The findings of this study can also be made as the reference to conduct the next research at SMP Negeri 1 Sunggal, Deli Serdang, notably when other researchers want to conduct the research of speaking achievement problem. Lastly, the students can also apply Brainstorming technique and Role-Play technique in learning speaking English.

Conclusion

Based on the findings the sections above, the researcher drew the conclusions, they are: teaching speaking by applying Brainstorming technique and Role-Play technique affect the students' speaking achievement at the ninth-grade students at SMP Negeri 1 Sunggal, Deli Serdang. It is proven from the result of the t-test (by applying Brainstorming technique) shows that the t-observed is higher than t-table ($8.19 > 1.671$) at the level of significance of 0.05. The result of the t-test (by applying Role-Play technique) shows that the t-observed is higher than t-table ($14.5 > 1.671$) at the level of significance of 0.05.

Thus, the experimental class produces higher score than control class. It means the alternative hypothesis is accepted. Brainstorming technique and Role-Play technique significantly affect the students' speaking achievement. Applying Brainstorming technique and Role-Play technique during the teaching-learning process in the classroom affect the students' speaking achievement.

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