THE EFFECT OF USING DIGITAL DIORAMA ON STUDENT'S SPEAKING SKILL PERFORMANCE

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ABSTRACT

English Education Study Program FKIP Almuslim University's third-semester students sometimes have trouble speaking the language. This is brought on by a fear of making a mistake, a lack of language knowledge, and a poor grasp of pronunciation. By utilizing effective and engaging teaching strategies and media, lecturers in the Speaking course must assist their students in resolving this issue. Diorama, particularly digital diorama, is an effective teaching tool because it is a specific three-dimensional media that illustrates or explains anything in miniature. This research was to find how the effect of using diorama in teaching students' speaking skill ability in increasing students' speaking skill ability. The population of these study students of in third semester of English Education Study Program of FKIP Almuslim University with 15 students. In order to see the students' improvement on speaking skill, the procedure of quantitative data with analytic scoring rubric formulated by Oller (1979). This is the one group pre-test and post-test. The pre-test was used for knowing the skill of the students before use diorama activities. After giving the treatment, the students got the post test. The one-tailed paired-samples t-test was used to examine the effect of using diorama in teaching students' speaking skill ability in increasing students. This result showed that digital diorama model influenced the enhancement of speaking skill after being trained with using digital diorama model.

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INTRODUCTION

In English language, there are four skills to be mastered there are listening, speaking, reading and writing (Rosyid, 2018; Muliadi & Rosyidi, 2021). Speaking is one of the four language skills which are very important to learn. Speaking is an interactive process of constructing meaning that involves producing, receiving and processing information (Rosyidi, 2022). Every students want to be able to speak English

fluently therefore all students must master all those skill. The best way of doing communication is by speaking. According to Richards and Renandya), "Speaking is one of the elements of communication" (J. Richards & Renandya, 2002). Furthermore, the function of speaking skill are to express an idea, someone feeling, thought, and it express spontaneously by orally. Speaking is the way for people to express their emotions, communicative needs, interact with other persons in any situation, and influence the others (Rosyidi, 2022). Speaking is the one of language of art of talk as communication interaction with someone, and it is very difficult to master it. Speaking skill is have a closely relationship with listening skill, in speaking act, the students must be listening and then speak up, because speaking is not only remembering and memorizing the sentences in written but speaking is spontaneous to show students idea by orally at the same time sharpen their abilities. Speaking has been one of the most important in the learning. Because students communicate and exchange opinions by speaking.

Speaking is crucial when learning a second language, including in English. Speaking has been neglected in schools and colleges for a variety of reasons, such as the emphasis on grammar and the imbalance between instructor and student talents, whether it is important or not. Speaking in English is no longer examined for competency due to challenges in objectively evaluating it and the length of an English speaking test (Clifford, 1987). It takes amazing talent to speak both one's mother tongue and second language. Developing speaking skills is the most important aspect of learning a second or foreign language, and the success of that endeavor is determined by one's ability to carry on conversations in that language (Nunan, 1995).

One of the four language abilities, speaking is the most crucial since people who acquire a language are referred to as speakers of that language (Ur, 1996). Giving students the ability to communicate effectively and correctly in English is the major goal of teaching English (Davies & Pearse, 2000). However, it appears that language learners lack the necessary expertise in this area because they are unable to speak clearly and effectively. So, in order to increase the proficiency of language learners, we need a strategy and quality learning resources.

The third semester of the English Education Study Program at FKIP Almuslim University is where the writers of this research teach speaking skills using digital diorama as a medium. hopefully, the media diorama can make them spirit and more creative in learning speaking and also to stimulation their own ideas. How does using a diorama to teach pupils how to speak improve their speaking ability? This is the formulation research problem.

The purpose of the digital diorama in this study is to give students a smaller, more portable overview of an object that will be used as discussion material during class. Students can express opinions about the topics being covered and gain an understanding of them by viewing the diorama.

The benefit of diorama media is that it offers direct experience, presents concretely and avoids verbalism, can represent the object as a whole, including its construction and how it functions, can clearly illustrate the organizational structure, and can clearly show the flow of a process. Dioramas' shortcomings include their inability to reach numerous targets, the need for extensive storage, and the difficulty of maintenance. Making the diorama large enough for the entire class to see will help to make up for this shortcoming. The diorama can be constructed as a closed model to facilitate difficult maintenance and prevent easy dirt accumulation.

Speaking abilities and diorama media are related in the sense that having diorama media around can help with speaking ability learning. The ability to depict a form or an event that can be brought into class with a size that is not the same as the original is one of the benefits of diorama media.

Students can study and analyze the scenario and objects in the diorama utilizing the skill of speaking using diorama media. Students derive ideas for speeches from the findings of these observations, and there is a summary of the context in which these students will talk, allowing for more organized, cogent, and varied speaking on the part of the students. Without practice, speaking is not an easy talent to learn. Students can practice speaking skills using visual media to improve their communication abilities. In primary schools, the use of diorama media in the teaching and learning process attempts to enhance

students' communication abilities. Aiming to boost students' passion for developing speaking abilities, diorama media is designed to be as appealing as possible.

Dewi and Muzammil (2020) say that the teaching of speaking can mean to teach students to converse in target language since speaking can not be separated from having a conversation. So the students will be directly involved in speaking activities whenever they are conducting a conversation. When it is assumed that speaking is the way the students express their idea and feelings and communicate their intentions, speaking then becomes an inevitable skill to be trained or taught. As it was discussed previously, speaking is one of the ways the learners express orally their idea and thought. So the teaching of speaking should be able to give contribution to the development of the students' abilities to any aspects of language skills.

Function of speaking an important dimension of conversation is using a style of speaking that is appropriate to the particular circumstances. According to Brown and Yule cited in Richards (2008), there are three functions of speaking, those are: talk as interaction, talk as transaction, and talk as performance.

First, talk as interaction refers to what we normally mean by — conversation and describes interaction that serves a primarily social function. When people meet, they exchange greetings, engage in small talk, recount recent experiences, and so, on because they wish to be friendly and to establish a comfortable zone of interaction with others. The focus is more on the speakers and how they wish to present themselves to each other than on the message. Such exchanges may be either casual or more formal, depending on the circumstances. There are some main features of talk as interaction, a) has a primarily social function, b) reflects role relationships, c) reflects speaker's identity, d) may be formal or casual, e) uses conversational conventions, f) reflects degrees of politeness, g) employs many generic words, h) uses conversational register, i) is jointly constructed.

Second, talk as transaction refers to situations where the focus is on what is said or done. The message and making oneself understood clearly and accurately is the central focus, rather than the participants and how they interact socially with each other. The main features of talk as transaction are: a) it has a primarily information focus, b) the main focus is on the message and not the participants, c) participants employ communication strategies to make themselves understood, d) there may be frequent questions, repetitions, and comprehension checks, as in the example from the preceding classroom lesson, e) there may be negotiation and digression, f) linguistic accuracy is not always important.

Third, talk as performance refers to public talk. That is talk that transmits information before an audience, such as classroom oral presentations, public announcements, and speeches. Talk as performance tends to be in the form of monolog rather than dialog, often follows a recognizable format (e.g., a speech of welcome), and is closer to written language than conversational language. The main features of talk as performance are: a) a focus on both message and audience, b) predictable organization and sequencing, c) importance of both form and accuracy, d) language is more like written language, e) often monologic.

According to the material above the writer conclude the function of speaking is very important especially in style of language in certain circumstances there are three function of speaking, those are:

a.   The first talk as interaction.

Talk as interaction more focus on the conversation and want to get to know each other more than the massage that they want to convey to each other.

b.   The second talk as transaction.

Talk as transaction more focus on what is said and done, and this focuses more on the massage delivered than knowing each other.

c.   The last talk as performance

Talk as performance more leads to talking or conveying information in front of the audience example public announcements.

According to (Oller, 1979), a language proficiency measuring tool aims to gauge how much a student has learned in a foreign language course, or in some of its components. Oller refers to the assessment of students' mastery of course material and accomplishment of course objectives in this definition (Oller, 1979).

Accent, grammar, vocabulary, fluency, and comprehension are among the factors that Oller (1979) claims should be taken into account when evaluating a speaker's proficiency in a language. This indicates that if students can master some of the speaking ability test's constituent parts, they can master speaking skills. This is the rationale behind the researcher's decision to employ the John W. Oller, Jr., speaking proficiency test, which allows for the measurement of a number of speaking abilities that can later be used to gauge students' skill in speaking English.

To teach speaking skill, it is required for the instructor to have a thorough understanding of the process of involvement in communication, such as motivation, media, interest etc. There are numerous media available for teaching and learning English speaking that can pique students' interest in the subject, provided that the media chosen is appropriate for the lessons being taught. However, the author believes that digital diorama is a useful medium for improving pupils' speaking abilities.

Schools have a fantastic potential thanks to digital technologies. It is commonly acknowledged that they address the demand for information in society, particularly the requirement for lifelong learning, and increase young people's interest in order to attain learning outcomes that are beneficial in daily life. A genuine intellectual partner that can help close the information-learning gap, technology can become a significant amplifier of communication and interpersonal collaboration when utilized appropriately and in accordance with socio-constructivist teaching approaches (Ghislandi, 2012). Web 2.0 technologies promote interaction, sharing, and teamwork. Thus, through activities, teaching strategies, relationships with the study materials, etc., virtual learning environments transform into locations for experiences as well as social settings through interactions, communication, and sharing. Because of the opportunity to engage with others and learn through discussion, everyone participates fully in learning settings and contributes to the completion of tasks and shared projects by sharing their own experiences, information, and abilities to increase collective knowledge (Herrington et al., 2014).

Dioramas, in this case digital diorama, are actual artifacts used to depict phenomena. Additionally, dioramas are life-size, three-dimensional exhibits that can be found at scientific or natural history museums (Brown et al., 1977). Additionally, the diorama explains how objects relate to one another and their surroundings. The diorama's depiction of these objects is an accurate representation of reality (Tunnicliffe & Scheersoi, 2015).

In order to accomplish specific goals for teaching themes and topics, dioramas can also be used. For instance, in a biology diorama, real elements like flora and soil structure make it simple to show students what an animal species' true environment is like. Without utilizing actual animal examples, dioramas can be utilized in the educational process to illustrate ideas like symbiotic life and prey hunters. Additionally, dioramas aid in recognizing historical biodiversity, such as extinct life forms (Marandino et al., 2009). In order to employ optimism in educational instructions to accomplish learning goals, especially in learning to speak English, all of the characters in this diorama raise it (speaking).

From the foregoing information, the author can draw the conclusion that dioramas are effective teaching tools because they are a special kind of media with three dimensions that describe or explain anything in tiny form. Media that has three dimensions length, thickness, and width and can be viewed from all angles is known as three-dimensional media. Real or small things make up the majority of three-dimensional media. Dioramas are an effective teaching tool for students. The use of this material will help teachers and students learn more effectively and foster their creativity. Dioramas are distinctive and crucial teaching instruments for everyone's biology education. It offers details on their historical development, decline, and more recent renaissance, as well as past and present developments in their construction, the taxidermy technique, and aspects of interpretation and educational research about learning processes, including various techniques to engage audiences, like performance and storytelling.

METHODS

This quantitative research is to examine the effect of using diorama activities in students' speaking skill, in this research the researcher took the location at English Education Study Program of FKIP Almuslim University. It is located at Jalan Almuslim, Matangglumpangdua, Paya Cut, Kec. Peusangan,

Kabupaten Bireuen, Aceh. This research will conduct on the third semester in the academic year 2022/2023.

According to Suharsimi Arikunto, a population is a set (or collection of all elements processing one or more attributes of interest. So the population is taken of whole subject or person in study to get required data. The population of these study students of in third semester of English Education Study Program of FKIP Almuslim University with 15 students.

A sample is a small portion of the population that was examined for the study that is gathering data. "Sample is a subject of individual or cases from inside the community," according to Nunan. In taking sample the researchers use all of the population of students of the third semester of English Education Study Program of FKIP Almuslim University. This study is one group pre and post-test experimental research design.

The researcher used an oral test as instrument to get the data. To collect the data, The researcher gave students twice tests, those are pre-test and post-test. The pre-test was aimed at measuring the students' preliminary their speaking knowledge and achievement before they entered the experimental circle. The post-test was aimed at finding out the data needed to evaluate after got the experiment.

The form of speaking test was to express of students' performance. The student discussed in group using media digital dioramas that have been given with their own word. Then, the researcher got the score from Accent, Grammar, Vocabulary, Fluency, and Comprehension. The researcher gave one minute to student to speak use media digital dioramas with their own words in front of the class. In order to see the students' improvement on speaking skill, the procedure of quantitative data with analytic scoring rubric formulated by Oller (1979) was used (see Table 3.1).

Table 3.1 Rating Sheet

Student: (ID) _____ (Name) _____ Rater_____ Date_____

Proficiency Description	Category of Performance						
	1	2	3	4	5	6	
1. Accent	0	1	2	2	3	4	_____
2. Grammar	6	12	18	24	30	36	_____
3. Vocabulary	4	8	12	16	20	24	_____
4. Fluency	2	4	6	8	10	12	_____
5. Comprehension	4	8	12	15	19	23	_____
Total							

In order to know the students' level, there is a table for converting scores on the various scale to a composite total score which can be converted to a rating on the overall five levels (see previous chapter). The conversion table is given below:

Table 3.2 Conversion Table

Total Score (from Weighting Table)	Foreign Service Institute (FSI) Level
16 – 25	0 +
26 – 32	1
33 – 42	1 +
43 – 52	2
53 – 62	2 +
63 – 72	3
73 – 82	3 +
83 – 92	4
93 – 99	4 +

From the above description, it can be seen that there are 5 components to assess speaking skill. Here the writer wants to explain the way to score for each component. For example, suppose a given

candidate is interviewed and he made many mistakes in action or he has to repeat many times to make him understood. So, he belongs to category 2 and he is scored 1 for accent. Suppose further the examinee is rated 3 on the Grammar scale which means he makes frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding. Based on the Weighting Table this score is worth 18 points toward the total. Say then the same examinee is rated 3 on Vocabulary for an additional 12 points; 3 on Fluency for 6 points; and 3 on Comprehension for 12 points. The examinee's total score would thus be 1 + 18 + 12 + 6 + 12 = 49. This score according to the Conversion Table would rank the candidate at level 2. That is, the candidate would be judged to be 'Able to satisfy routine social demands and limited work requirements.

The scale is the central tendency called mean or arithmetic average. It is sum of all the values in a distribution divided by the number of cases. In terms of formula it is (Ary, et al, 2002 : 128):

$$\overline{x} = \frac{\sum x}{N}$$

where:

$\overline{x}$ = mean;

$\sum$ = sum of;

x = raw score;

N = number of cases.

Recording was used to record the students' voice when they speak during the test. The researcher used a tape recorder like hand phone. The purpose this recording is to analyze the scoring rubric of speaking.

The researchers use technique of data collecting in this research is test. In order to get the valid information that will support the researcher. She uses test to for knowing the result study of speaking before and after using chain pictures. The data collection process is nothing other than doubling of primary data for research purposes. In accordance with the necessary data in this study, the technique data collection in this study includes:

Test is an instrument or procedure designed to elicit performance from learners with the purpose of measuring their attainment of specifies criteria.

a. Pre- test

The writers use pre-test for knowing the skill of the students before use diorama activities, the students must make their daily activities and the students practice in front of the class.

b. Post-test

After giving the treatment, the students got the post test. It will be used to measure the effect of diorama activities toward students' speaking ability.

Overall, the independent variable in this study is digital diorama model. The dependent variable in this study is the scores of participants' speaking ability. For research question "how the effect of using diorama in teaching students' speaking skill ability in increasing students' speaking skill ability', the one-tailed paired-samples t-test was used to examine the effect of using diorama in teaching students' speaking skill ability in increasing students. All analysis was performed using SPSS statistic package for Window Version 16.0. Table 2.6 summarizes the measurements and data analysis for research hypotheses.

Table 2.6   The data analysis for main research hypothesis and three research sub hypotheses

Null Hypothesis	Measurement	Data Analysis

Ho: The post-test average speaking score of the third semester of English Education Study Program of FKIP Almuslim University after being taught using digital diorama model is the same as or lower than their pre-test average speaking score	Pre and post speaking ability test;	One tailed paired-samples t-test

In general, the procedure of this research can be described as follows:
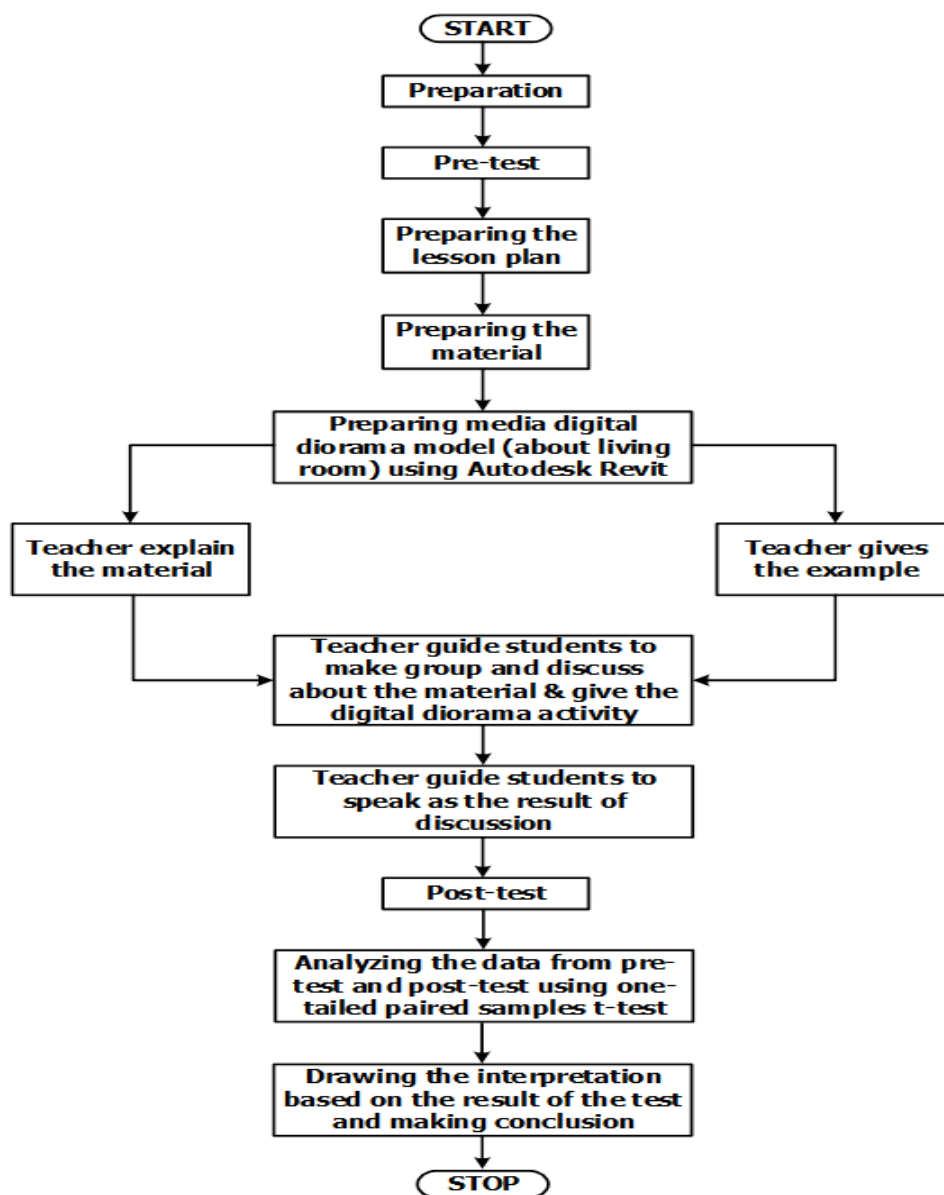
RESULTS AND DISCUSSION

The data of this research were the score of the students' pre-test and post-test. The score of pre-test was taken before the treatment, while the score of post-test was taken after the treatment. In giving test, the students were asked to describe about their own home, especially the living room, using media digital diorama. Then the test was evaluated by concerning the five components of speaking: accent, grammar, vocabulary, fluency and comprehension. Each component had its score.

1. The Students Pre-Test Score

The students' pre-test score of control class could be shown on Table 1.

Table 4.2 Students' Score of Pre-Test

No.	Students' Initial	Accent	Grammar	Vocabulary	Fluency	Compre-hension	Amount	Level	Category
1.	M	2	24	16	6	15	63	3	good
2.	IR	4	36	20	8	15	83	4	very good
3.	DSR	1	12	8	4	12	37	1+	poor
4.	RD	2	24	16	6	15	63	3	good
5.	M	1	18	8	2	8	37	1+	poor
6.	PR	2	36	20	8	19	85	4	very good
7.	IA	1	12	8	4	8	33	1+	poor
8.	AR	1	12	8	4	8	33	1+	poor
9.	AM	2	24	12	4	12	54	2+	fair
10.	US	3	36	20	8	19	86	4	very good
11.	MAF	0	12	8	6	8	34	1+	poor
12.	MH	1	12	8	6	8	35	1+	poor
13.	ASR	0	12	8	4	12	36	1+	poor
14.	NZ	2	24	16	4	19	65	3	good
15.	N	0	18	8	4	8	38	1+	poor
						TOTAL	782		

The table above shows us about the students' pre- test score of experimental class based on criteria in speaking skill. The data shows that the lowest score of pre-test is 33 and the highest score is 86. Based on Table 4.2, it can be determined the mean score of pre-test by formula:

$$\bar{x} = \frac{\sum x}{N} = \frac{782}{15} = 52.133$$

2. The Students Post-Test Score

The students' post-test score of experimental class could be shown on Table 1 as follows:

Table 4.2 Students' Score of Post-Test

No.	Students' Initial	Accent	Grammar	Vocabulary	Fluency	Compre-hension	TOTAL	Level	Category
1.	M	3	30	20	10	23	86	4	very good
2.	IR	4	36	24	8	15	87	4	very good
3.	DSR	2	24	20	6	15	67	3	good
4.	RD	3	30	20	10	23	86	4	very good
5.	M	2	24	12	6	12	56	2+	fair
6.	PR	3	30	20	10	23	86	4	very good
7.	IA	1	24	12	6	12	55	2+	fair
8.	AR	3	30	20	10	23	86	4	very good
9.	AM	3	30	20	10	23	86	4	very good
10.	US	3	30	20	10	23	86	4	very good
11.	MAF	3	30	20	10	23	86	4	very good
12.	MH	3	24	16	6	15	64	3	good
13.	ASR	2	24	12	8	12	58	2+	fair
14.	NZ	3	30	20	12	23	88	4	very good
15.	N	2	30	16	6	15	69	3	good
						TOTAL	1146		

The Table shows us about the students' post- test score of experimental class based on criteria in speaking skill. The data shows that the lowest score of post-test is 55 and the highest score is 88. Based on Table 4.2, it can be determined the mean score of pre-test by formula:

$$\overline{x} = \frac{\sum x}{N} = \frac{1146}{15} = 76.4$$

3. The Result of Before and After Paired Sample t-Test of Average Speaking Score after being Taught Using Digital Diorama Model

One tailed before and after paired sample t-test was conducted to answer the research question. The result showed that there was statistically significant higher between the pre and post-test average speaking score of the third semester of English Education Study Program of FKIP Almuslim University students after being taught using using digital diorama model, because the significance value was ($p = .043/2 = .0215$) and it was below the significance value $\alpha < .05$ (see Table 3.10). So, the Ho (null hypotheses): the post-test average reading score of English Education Study Program of FKIP Almuslim University students after being taught using using digital diorama model is the same as or lower than their pre-test, could be rejected. This result showed that digital diorama model influenced the enhancement of speaking skill after being trained with using digital diorama model. The one group pre-test and post-test of the third semester of English Education Study Program of FKIP Almuslim University students after being taught using digital diorama model analysis is shown in Table 3.10.

Table 3.10   The one group pre-test and post-test t-test of the third semester of English Education Study Program of FKIP Almuslim University students Analysis

	Paired Differences							
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1 Before - After	-2.42667E1	15.44329	3.98744	-32.81888	-15.71446	-6.086	14	.000

The main hypothesis specified that the average reading score of the EFL Indonesian students across different learning styles before and after being taught using Metacognitive Strategy Instruction is different. Whereas the first hypothesis stated that the post-test average reading score of the visual EFL Indonesian students after being taught using Metacognitive Strategy Instruction is significantly higher than their pre-test score.

CONCLUSION

The achievement of students' speaking skill of experimental group after treatment was better than experimental group before treatment. It can be seen from the mean of post-test in the experimental class (62.25) is higher pre-test in experimental class (45.42). The higher score from experiment class is 86 and the lower score is 50. There is a significance difference of average score from pre-test and post-test of experiment class. So, it could be concluded that media diorama to facilitate students' understanding on speak English in experimental group.

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