

# **The Effectiveness of Using Demonstration Method and AIR (Auditory, Intellectually and Repetition) Learning Model to Improve Students' Ability Writing Procedure Texts (Case of the 9<sup>th</sup> grade Students of MTs Muhammadiyah Nalumsari Jepara)**

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## **Abstrak:**

Objectives of the study are as follow: (1) To explain if there is any significant differences between pre test and post test of demonstration methods, (2) To explain if there is any significant differences between pre test and post test of AIR (Auditory, Intellectually, and Repetition) learning model, (3) To explain if there is any significant differences between post test using demonstration Method and AIR learning model, (4) To describe the challenges do students face when using the demonstration methods and the AIR (Auditory, Intellectually and Repetition) learning model in writing procedure texts.

The method used in this study is the mixed methods method. This study is a research step by combining two forms of research that have existed previously, namely qualitative research and quantitative research. Subject of the research in this thesis was a number of subjects or students of the total member of the students of the ninth graders of MTs Muhammadiyah Nalumsari Jepara in the academic year 2024/2025. The researcher took 2 classes (9A and 9B) that contain 36 students each class. The analysis of this research by **Qualitative Analysis** and **Statistical Procedure Analysis** with analysis of normality test, homogeneity test, hypothesis test including t-test and Effectiveness Test: N-Gain.

Based on the research results, the following conclusions can be drawn: (1) There is any significant differences between pre test and post test of demonstration methods. Based on the paired t-test, the calculated t result is  $10.265 > t$  table 2.0301 with a positive direction, (2) There is any significant differences between pre test and post test of AIR learning model. Based on the paired t-test, the calculated t result is  $4.752 > t$  table 2.0301 with a positive direction, (3) There is any significant differences between post test using demonstration Method and AIR learning model. Based on the independent t-test, the calculated t result is  $6.605 > t$  table 1.9960 with a positive direction proving that ability of writing procedure texts post-test score of demonstration methods and AIR (Auditory, Intellectually, and Repetition) learning model is significantly different, (4) Student challenges when using the demonstration methods and the AIR (Auditory, intellectually and Repetition) learning model in writing procedure text.

**Keywords:** Demonstration Method, AIR (*Auditory, Intellectually and Repetition*) Learning Model, Ability Writing, Procedure Texts

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## 1. INTRODUCTION

Writing is one of productive skills, which contains a symbol (orthographic) and involves a complex process. In making good writing, we must use correct grammatical rules, choose appropriate vocabulary, and consider the coherent and cohesion. Some linguists gave some definitions of writing that may help us get clearer definition. One of them is stated by Celce and Olsain, (2020; 142) , “Writing is the production of the written word that results in a text but the text must be read and comprehended in order for communication to take place.”

Writing skill is a skill that is considered by some as the most difficult skill for students to master compared to other language skills. Writing skill is a process of growth through a lot of practice. Writing skills cannot be obtained by simply studying grammar and learning writing theory knowledge, let alone just memorizing the definitions of terms contained in the field of composing. Writing skill is a skill that must be possessed by everyone. Someone who has writing skills can express all his ideas or ideas in written language. A person will also gain a lot by having writing skills.

Writing skill is difficult for students. Some researches show the reasons of writing become difficult for the students. In writing, the students need to think first about the idea or topic to write. There is also selection of words in order to arrange those words into a good structured sentence. Each paragraph should link each other to create a good text.

The students also are required to understand certain text types or text genres in accordance with the class level. There are so many different text types such as, narrative, descriptive, procedure, anecdote, etc. which need to be understood well by the students. One text genre that always is very interesting for students is procedure text or instructional text. This text provides information of how to do something with certain steps. The teacher can show a demonstration to teach this text. Thus, the students will see directly and experience the real material (Aditia, 2023: 2).

To teach procedure text requires a suitable and typical method in order to assist students in practicing. The demonstration method is considered to be the most applicable method in learning Writing procedure texts. Thus, the following description shall discuss about the writing essence, procedure text, demonstration method, and how to teach Writing procedure texts using demonstration method.

The demonstration method is a method that is quite effective because it helps students to find answers with their own efforts based on correct facts or data. The demonstration method is a method of presenting lessons by demonstrating and showing students about a particular process, situation or object, either actually or only just an imitation (Abdul Majid, 2014: 197).

Another way is to implement the AIR (Auditory, Intellectually and Repetition) learning model. The AIR learning model is an abbreviation of Auditory, Intellectually, Repetition. The Auditory, Intellectually, Repetition (AIR) learning style is a learning model that in its learning contains three main aspects, namely: auditory or learning by listening and speaking, then the second is intellectually or learning by using thinking skills and the third is repetition or learning by repeating the material in learning so that students will not easily forget (Huda, 2013:289).

Based on that, the students are offered something new and different from what they usually get in classes. They don't only learn from text book and the other people's experience but also learn from their own experience in writing text. In other hands, teacher teaches students to be more open-minded of being feudal. Through this way, the writer would like to find out which method is more suitable to gain the quality of students' Writing procedure texts Ability. Based on the background above, the writer tries to attempt of investigating The effectiveness of using demonstration method and AIR (*Auditory, Intellectually and Repetition*) learning model to improve student's ability writing procedure texts (Case of the 9<sup>th</sup> grade Students of MTs Muhammadiyah Nalumsari Jepara).

Objectives of the study are as follow: (1) To explain if there is any significant differences between pre test and post test of demonstration methods, (2) To explain if there is any significant differences between pre test and post test of AIR (Auditory, Intellectually, and Repetition) learning model, (3) To explain if there is any significant differences between post test using demonstration Method and AIR learning model, (4) To describe the

challenges do students face when using the demonstration methods and the AIR (Auditory, Intellectually and Repetition) learning model in writing procedure texts, (4) To describe the students' perception on demonstration method and AIR learning model in writing procedure text.

## **2. RESEARCH METHOD**

### **Research Approach and Type**

The method used in this study is the mixed methods method. This study is a research step by combining two forms of research that have existed previously, namely qualitative research and quantitative research. According to Creswell (2016: 5) mixed research is a research approach that combines qualitative research with quantitative research

This study used an experimental research design with two pretest-posttest groups. The purpose of this study was to determine the achievement of the ability to write procedural texts of groups of students before and after being taught with the demonstration method and groups of students with the treatment of the AIR (Auditory, Intellectually and Repetition) learning model, and to determine significant differences in the ability to write procedural texts between students taught with the demonstration method and students taught with the AIR (Auditory, Intellectually and Repetition) learning model

### **Subject of the research**

Subject of the research in this thesis was a number of subjects or students of the total member of the students of the ninth graders of MTs Muhammadiyah Nalumsari Jepara in the academic year 2024/2025. The researcher took 2 classes (9A and 9B) that contain 36 students each class. Class of 9A was for experimental group, and 9B was for control group. In this school, class of 9A was the best class in this grade who the students get good score in each lesson, and 9B was the average class.

### **Data Collection Techniques**

To obtain accurate and scientific data, several techniques are used in collecting data, namely: (1) Observation. Observation is a scientific method that can be interpreted as observation through focusing attention on an object using the senses (Margono, 2023: 159). The form of observation used is a free form that does not require an answer but records what appears to support the research results, including taking participant and non-participant forms; (2) Documentation. To collect existing data, the author uses several documentation tools such as digital cameras and cellphone recordings that the author uses in conducting interviews. The author uses a digital camera to document interview activities in the form of photos. Thus, recording and documentation tools are very important to support research in collecting data, (3) Tes. The procedure of collecting the data of this research involved several steps. The first step, the researcher arranged the test. The second, the researcher gave the test to measure the students' ability before the treatment (pre-test). The third step, the researcher gave the test to measure the students' ability after the treatment (post-test). The forth step, the researcher analyzed them. And the last step, the researcher computed the data.

### **Method of Data Analysis**

Through scoring, the results of the students' work were needed to put in a form that was readily interpretable. Those data were useful to depict students' levels of Writing procedure texts Ability. Since the purpose of this research was to measure the students' proficiency, the researcher would interpret the results both statistically and non-statistically.

### **Qualitative Analysis**

The data analysis used is a descriptive analytical method, which describes the data collected in the form of words, pictures, and not numbers. Data from manuscripts, interviews, field notes, documents, and so on, are then described so that they can provide clarity on reality (Sudarto, 2017: 66). Data analysis version of Miles and Huberman (in Usman and Akbar, (2019: 85-89), that there are three activity flows, namely data reduction, data presentation, and drawing conclusions or verification.

### **Quantitative Analysis**

### 1) Study Completeness Test

To test the completeness of the Writing procedure texts Ability test results for the experimental group and control group, the SPSS Version 24.0 for Windows program was used. The hypotheses used are as follows:

H0:  $\pi = 75\%$  (the percentage of students who get a score  $\geq 75$  is the same as 75%)

H1:  $\pi \geq 75\%$  (the percentage of students who get a score  $\geq 75$  is more than 75%)

To determine learning completeness, the following guidelines are used (Gunawan, 2015: 122): (a) Determine the test significance level ( $\alpha = 5\% = 0.05$ ), (b) Compare the significance level obtained by Sig. (2-tailed), (c) If the significance obtained is  $> 0.05$  then H0 is accepted, (d) If the significance obtained is  $< 0.05$  then H0 is rejected.

As previously explained, learning with Quantum Teaching is said to be effective if it meets the success indicators as previously mentioned, namely experimental class classical learning completeness of at least 75%.

### 2) Paired T-test

T-Test is often called Student's t-test in the name of its founder "Student". T -test is used to compare two different set of values. It is generally performed on a small set of data. T-test is generally applied to normal distribution which has a small set of values. This test compares the mean of two samples. T-test uses means and standard deviations of two samples to make a comparison.

Paired t-test is one of the hypothesis testing methods where the data used are not free (paired). The most common characteristics found in paired cases are that one individual (research object) receives 2 different treatments. Even though using the same individual, researchers still obtain 2 types of sample data, namely data from the first treatment and data from the second treatment.

### 3) Effectiveness Test: n-Gain test

The N-Gain test is an effectiveness test intended to determine the effectiveness of using a particular method or treatment in experimental and control group research which is calculated using the N-Gain Score. Normalized gain or N-Gain Score is done by calculating the difference between the pretest score (test before the method/treatment is applied) and the posttest score (test after the method/treatment is applied). By calculating the gain score, we will be able to find out whether the use of a particular method can be said to be effective or not (Raharjo, 2021). The Normalized gain or N-Gain Score can be calculated based on the formula:

$$N - \text{Gain} = \frac{\text{Score Posttest} - \text{Score Pretest}}{\text{Score Ideal} - \text{Score Pretest}}$$

## 3. RESEARCH RESULTS AND DISCUSSION

### A. Research Result

#### 1. Students' Ability Writing Procedure Texts taught using the Demonstration Method

Based on the results of data analysis, it can be seen the statistical description of students's language skills in this study. For The Ability of Writing Procedure Texts of the experimental group, the pre-test results from the number of respondents were 36, the minimum value was 24, the maximum value was 90, the average was 54.14, and the standard deviation was 18.507. For The Ability of Writing Procedure Texts of the experimental group, the post-test results from the number of respondents were 36, the minimum value was 38, the maximum value was 100, the average was 80.67, and the standard deviation was 15.433. The Ability of Writing Procedure Texts of the experimental group experienced an average increase of 26.53.

#### 2. Students' Ability Writing Procedure Texts taught using the AIR (Auditory, Intellectually and Repetition) Learning Model

Based on the results of data analysis, it was found that, it can be seen the statistical description of The Ability of Writing Procedure Texts of the control group pre-test results from the number of respondents 36, minimum value 16, maximum value 90, average 46.39, and standard deviation 18.730. For The Ability of Writing Procedure Texts of the control group post-test results from the number of respondents 36, minimum value 28, maximum

value 90, average 56.61, and standard deviation 18.116. The Ability of Writing Procedure Texts of the control group experienced an average increase of 10.22.

### 3. Different of the Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model

a. Different of the Ability of Writing Procedure Texts score of the experimental group is significantly different before and after learning with Demonstration Method

The t-test was used to determine the differences in Students' Ability Writing Procedure Texts taught using the Demonstration Method. The results are as follows.

**Table 1 Results of the t-test for the experimental group**

#### Paired Samples Test

	t	df	Sig. (2-tailed)
Pair 1 Post test - Pre-test scores of experimental group	10,265	35	,000

Based on the t-test, the result of t count 10.265 > t table 2.0301 (df 35, two tail) and the level of significance of t count 0.000 < 0.05 with a positive direction proves that the Ability of Writing Procedure Texts score of the experimental group is significantly different before and after learning with Demonstration Method.

b. Different of the Ability of Writing Procedure Texts score of the control group is significantly different before and after learning without Demonstration Method

The t-test was used to determine the differences in Students' Ability Writing Procedure Texts taught using the AIR (Auditory, Intellectually, and Repetition) learning model. The results are as follows.

**Table 2 Results of the t-test for the control group**

#### Paired Samples Test

	t	df	Sig. (2-tailed)
Pair 1 Post test - Pre-test score of control group	4,752	35	,000

Based on the t-test, the result of t count 4.752 > t table 2.0301 (df 35, two tail) and the level of significance of t count 0.000 < 0.05 with a positive direction proves that the Ability of Writing Procedure Texts score of the control group is significantly different before and after learning using the AIR (Auditory, Intellectually and Repetition) Learning Model.

c. Different of the Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model

The t-test was used to determine the differences in Students' Ability Writing Procedure Texts taught using the Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model. The results are as follows.

**Table 3 Results of the t-test for the Score of Post-test Independent Samples Test**

		t	df	Sig. (2-tailed)
Test scores of experimental group	Equal variances assumed	6,605	70	,000
	Equal variances not assumed	6,605	67,810	,000

Based on the t-test, the result of t count  $6.605 > t$  table 1.9944 (df 70, two tail) and the level of significance of t count  $0.000 < 0.05$  with a positive direction proves that there is significant different of the Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model.

d. Effectivity of the Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model

The effectiveness of improving students' Ability of Writing Procedure Texts by comparing the Ability of Writing Procedure Texts test data of the experimental group and the control group. The effectiveness test explains the effectiveness of the treatment in improving the Ability of Writing Procedure Texts scores of the experimental group and control group. Effective contribution shows how far the effectiveness of learning using Demonstration Method and AIR (Auditory, Intellectually and Repetition) Learning Model on students' Ability of Writing Procedure Texts.

The N-Gain test is an effectiveness test intended to determine the effectiveness of using a particular method or treatment in experimental and control group research which is calculated using the N-Gain Score. Normalized gain or N-Gain Score is done by calculating the difference between the pretest score (test before the method/treatment is applied) and the posttest score (test after the method/treatment is applied). By calculating the gain score, we will be able to find out whether the use of a particular method can be said to be effective or not.

Based on the average of the posttest and pretest scores of the Ability of Writing Procedure Texts of the experimental group, the effectiveness can be calculated by the N-Gain.

**Tabel 4 N-Gain calculation results**

The effectiveness of learning using Demonstration Method

No	Group	average of pre-test	average of post test	gain	%	Category
1	Eksperimen (Demonstration Method)	54,14	80,67	0,73	63	High /Effective
2	Kontrol (AIR Learning Model)	46,39	56,61	0,35	35	Medium / Effective enough

#### 4. Student challenges when using the demonstration methods and the AIR (Auditory, intellectually and Repetition) learning model in writing procedure text

a. The challenges faced by students when using the demonstration method are the lack of confidence in demonstrating the procedure of demonstration activities. In addition, several other challenges faced by students in the learning process are: (1) differences in interests and motivations, (2) different English language abilities, (3) lack of motivation; (4) limited time to complete several demonstrations during learning time, (5) some students have difficulty understanding the material.

b. The challenges that students may face in the Auditory, Intellectual and Repetition (AIR) learning model are

understanding concepts. The AIR learning model is a learning method that prioritizes three aspects, namely: (1) Auditory, (2) Intellectual, and (3) Repetition.

## **5. The students' perception on demonstration method and AIR learning model in writing procedure text**

a. Student perceptions of the demonstration method.

b. Students' perceptions of the Auditory, Intellectually, and Repetition (AIR) learning model are generally positive. This study shows that this model is effective in improving students' understanding and learning outcomes.

## **B. Discussion**

### **1. Students' Ability Writing Procedure Texts taught using the Demonstration Method**

The t-test was used to determine the differences in Students' Ability Writing Procedure Texts taught using the Demonstration Method. Based on the paired t-test, the calculated t result is  $10.265 > t_{table} 2.0301$  (df 35, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts pre-test and post-test score of demonstration methods is significantly different before and after learning with Demonstration Method.

This is in accordance with the research of Aditia et al (2023) write research entitled "Demonstration Method to Teach Writing procedure texts". This article describes how demonstration method can be used to teach writing procedures text for students in English subject. Demonstration method applies creative and active teaching process that can motivate students to engage the learning process. Teaching English in writing procedures text is not easy. Demonstration method activities require the teachers to perform a demonstration of a process to make or create something. Therefore, teaching Writing procedure texts in English using demonstration method needs preparation. It is expected that this method can be a suitable method for teachers and students in mastering Writing procedure texts in English.

This also in accordance with the research of Safitri, et al (2024) write research entitled "Demonstration Method in Teaching Writing and Personal Pronouns". This research aimed to evaluate the effectiveness of the demonstration technique in teaching writing and personal pronouns refer to grammar to Private High School students in Lampung. Writing is a complicated aspect of English skills, particularly for personal pronouns. Personal pronouns are used by people, animals, things, or things. These pronouns depend on the role (subject, object, or possessive), number, third-person, and gender of the replaced noun. The results indicate that the demonstration technique is an effective method for teaching writing, particularly for enhancing students' understanding of personal pronouns. Hence, demonstration techniques offer an alternative approach to selecting methods for English language learning. Through the implementation of these techniques, there is an expectation that English learning will become more interactive, thereby engaging students' interest.

This also in accordance with the research of Basri, et al (2024) write research entitled "The effects of the Demonstration Method in teaching writing". The variable of this research consisted of two variables: the Demonstration method as the independent variable and the student's writing ability as the dependent variable. The sample was 41 students and was taken using a purposive sampling technique. The instrument used in this research is a writing test. There, the demonstration method significantly affected teaching writing to second-grade students of SMP Negeri 1 Baula.

This is also in accordance with the theory of Rusminiati (2017:2) the demonstration method is a demonstration of an event, or behavior that is exemplified so that students or students in a class can understand easily. Meanwhile, according to Roestiyah, N (2018:80), explains that the demonstration method is one of the teaching methods where the teacher or resource person shows or demonstrates a process to students or students. Demonstrations can be used in all subjects. In carrying out the demonstration, the teacher must be sure that all students can pay attention to and observe the object to be demonstrated. Before the demonstration process, the teacher has prepared the tools used in the demonstration.



## **2. Students' Ability Writing Procedure Texts taught using AIR (Auditory, Intellectually and Repetition) Learning Model**

The t-test was used to determine the differences in Students' Ability Writing Procedure Texts taught using the AIR (Auditory, Intellectually and Repetition) Learning Model. Based on the paired t-test, the calculated t result is  $4.752 > t$  table 2.0301 (df 35, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts pre-test and post-test score of AIR (Auditory, Intellectually, and Repetition) learning model is significantly different before and after learning with AIR (Auditory, Intellectually and Repetition) Learning Model.

This is in accordance with the research of Tyaningrum (2015) wrote a study entitled "Improving the Quality of Civics Learning Through the Auditory Intellectually Repetition Model with Powerpoint Media for Class V Students of SDN Pudukpayung 02 Semarang City. The conclusion through the Auditory Intellectually Repetition model with Powerpoint media was able to improve the quality of Civics learning in class V students of SDN Pudukpayung 02 Semarang City. Suggestions: Teachers should apply innovative learning models and varied media in learning. Bonatua, D. S., Mulyono, D., & Febriandi, R. (2021) wrote a study entitled "Implementation of the AIR (Auditory, Intellectually, Repetition) Learning Model Using Image Media in Elementary School Thematic Learning". Based on the results of the study and discussion, it can be concluded that the Implementation of the AIR (Auditory, Intellectually, Repetition) Learning Model Using Image Media in Thematic Learning for Grade IV of Marga Tunggal Elementary School. This can be seen from the average pretest score of 48.08 and posttest 78.3. It was concluded that the implementation of the AIR (Auditory, Intellectually Repetition) learning model was complete in significantly improving the learning outcomes of grade IV students of Marga Tunggal Elementary School.

Luthfiah Syahid, Rasmi Djabba, Nurul Mukhlisa (2021) wrote a study entitled "Application of the Auditory Intellectually Repetition Learning Model to Improve Learning Outcomes of Elementary School Students in Barru Regency". This research is a classroom action research (CAR) which aims to determine the process of applying the Auditory Intellectually Repetition (AIR) learning model about the influence of the environment on the livelihoods of the fourth-grade students and to determine the increase in learning outcomes about the influence of the environment on the fourth-grade students' livelihoods. application of the Auditory Intellectually Repetition (AIR) learning model. The conclusion of this study is the application of the Auditory Intellectually Repetition (AIR) learning model can improve the process and learning outcomes about the influence of the environment on the livelihoods.

The AIR Learning Model is one of the learning models with a constructivist approach that emphasizes that learning must utilize all the senses that students have. This Learning Model assumes that learning will be effective if it pays attention to three things, namely Auditory, Intellectually and Repetition. Auditory means learning must be through listening, listening, speaking, achieving, arguing, expressing opinions and responding. While intellectually means that learning must use thinking skills (mind-on), must be with concentration of mind and practice using it through reasoning, investigating, identifying, finding, creating, constructing, solving problems and applying. Then, Repetition means repetition which means deepening, expanding, consolidating by means of students being trained through giving assignments or quizzes (Fauji & Winarti, 2013)

## **3. The different of the Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model**

Based on the research results, it was found that the Ability of Writing Procedure Texts of the experimental group students in the pre-test averaged 54.14 and after the Implementation of the Learning using Demonstration Method in the post-test averaged 80.67. There was an increase in score of 26.53. Based on the research results, it was found that the Ability of Writing Procedure Texts of students in the control group in the pre-test averaged 46.39 and in the post-test the average was 56.61. There was an increase in score of 10.22.

The results of the Gain test analysis of the increase in The Ability of Writing Procedure Texts scores of the experimental group obtained an average increase in gain of 0.63, meaning that the increase in The Ability of Writing Procedure Texts scores of the experimental group with the Demonstration Method was in the high category ( $g > 0.7$ ) with effectiveness: quite effective, namely the interval 56 - 75%.



The results of the analysis of the effectiveness of increasing The Ability of Writing Procedure Texts in the control group obtained an average increase in gain of 0.56 or 56%, meaning that the increase in The Ability of Writing Procedure Texts in the control group with AIR (Auditory, Intellectually, and Repetition) learning model was in the medium category ( $0.3 \leq g \leq 0.7$ ) with effectiveness: quite effective, namely the interval 56 - 75%.

The t-test was used to determine the differences in Students' Ability of Writing Procedure Texts between the students taught using Demonstration Method and those taught using AIR (Auditory, Intellectually and Repetition) Learning Model. Based on the independent t-test, the calculated t result is  $6.605 > t_{table} 1.9960$  (df 67, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts post-test score of demonstration methods and AIR (Auditory, Intellectually, and Repetition) learning model is significantly different.

In this study, it was proven that the increase in the Writing Ability of Procedure Texts of the group of students using demonstration methods was higher than the group of students using the AIR (Auditory, Intellectually, and Repetition) learning model. The results of this study prove that the demonstration method, although considered a conventional learning method, has a higher impact than the innovative learning model, namely the AIR (Auditory, Intellectually, and Repetition) learning model.

This is also in accordance with the theory of Sagala (2021) that the demonstration method is the simplest method compared to other teaching methods. The demonstration method is a show of the process of an event or object occurring until the appearance of exemplary behavior so that it can be known and understood by students in real or imitation. The demonstration method is good for getting a clearer picture of things related to the process of organizing something, the process of making something, the process of working something, the process of doing or using it, the components that make up something, comparing one method with another, and to know or see the truth of something.

Student challenges when using the demonstration methods and the AIR (Auditory, intellectually and Repetition) learning model in writing procedure text.

#### **4. Student challenges when using the demonstration methods in writing procedure text**

The challenges faced by students when using the demonstration method are the lack of confidence in demonstrating the procedure of demonstration activities. In addition, several other challenges faced by students in the learning process are: (1) differences in interests and motivations, (2) different English language skills, (3) lack of motivation, (4) limited time constraints to complete several demonstrations during learning time, (5) some students have difficulty understanding the material.

This is in accordance with the theory of Djamarah and Zain (2020: 91) that there are several things related to the demonstration method, namely: (1) This method requires special teacher skills, because without this support the implementation of the demonstration will not be effective, (2) Facilities such as equipment, places, and adequate costs are not always available properly, (3) Demonstrations require thorough preparation and planning in addition to requiring a fairly long time, which may be forced to take up other class time or hours. So in carrying out this demonstration method we need to combine it with other methods so that they can complement each other.

#### **5. Student challenges when using the AIR (Auditory, intellectually and Repetition) learning model in writing procedure text**

The challenges that students may face in the Auditory, Intellectual and Repetition (AIR) learning model are understanding concepts. The AIR learning model is a learning method that prioritizes three aspects, namely: (1) Auditory, which is learning by listening, the challenge is that students are not used to listening to English so that what is heard is not the same as what is written, (2) Intellectual, which is learning by thinking and solving problems, the challenge is that students do not think sequentially, so they have to repeat in compiling procedural sentences in English, (3) Repetition, which is repetition to be more effective, the challenge is that repetition sometimes takes longer while learning time is limited.

This is in accordance with the theory of Ariska, Fuaddunazmi & Habibi (2016) that there are advantages and disadvantages of AIR learning. The advantages are: (1). Train students' listening and courage to express opinions,

(2) Train students to be able to solve problems creatively, (3). Train students to remember the material that has been learned, (4). Students become more active and creative. The disadvantages of AIR learning are in the aspects that must be integrated, namely auditory, intellectually, and repetition so that at a glance learning takes a long time. But this can be minimized by forming groups in the auditory and intellectual aspects.

Based on the theory above, it can be concluded that apart from having advantages, the AIR learning model also has disadvantages, including requiring a relatively long time, so teachers must be able to use their time as best they can so that learning does not take too long.

#### **6. The students' perception on demonstration method and AIR learning model in writing procedure text**

##### **a. The students' perception on demonstration method in writing procedure text**

Student perceptions of the demonstration method, (1) students find it easier to understand learning material because they can play an active role because they receive clearer and more concrete teaching, (2) students feel happy with the learning process for the material being studied, (3) students are more helped to find answers by their own efforts based on facts or correct practices, (4) students have to spend their own money to buy demonstration practice materials, (5) by working together with friends, it becomes a fun activity in learning.

This is in accordance with Surahkmad's opinion (2016: 96) that the demonstration method has advantages, including: Through the demonstration method, verbalism can be avoided, because students are asked to directly pay attention to the learning material being explained. Students' attention can be focused on things that are considered important by the teacher so that students can capture important things. The learning process will be more interesting, because students not only hear, but also see the events that occur. By observing directly, students will have the opportunity to compare theory and reality. Thus, students will be more convinced of the truth of the learning material.

The demonstration method is appropriate if it aims to provide skills, reduce the use of monotonous language, and help students to make it easier to understand clearly about a process or activity because it is presented in the form of a demonstration so that it is more interesting and efficient. The teaching and learning process occurs in two-way interaction between teachers and students. These two activities influence each other and can determine learning outcomes. The teacher's ability to convey or transform the field of study well is an absolute requirement that cannot be negotiated because this can affect the teaching process and student learning outcomes. This is also in accordance with the opinion of Djamarah and Zain (2020: 90) that the demonstration method has the following advantages and disadvantages: (1) Can make teaching clearer and more concrete, thus avoiding verbalism (understanding in words or sentences), (2). Students find it easier to understand what is being learned, (3). The teaching process is more interesting, (4) Students are stimulated to actively observe, adjust theory to reality and try to do it themselves.

##### **b. The students' perception on AIR learning model in writing procedure text**

Students' perceptions of the Auditory, Intellectually, and Repetition (AIR) learning model are generally positive. This study shows that this model is effective in improving students' understanding and learning outcomes: (1) improving understanding of the concept of writing procedure text, (2) helping students understand writing procedure text material better, (3) providing stimulation and encouragement to students to actively participate in the learning process, (4) getting students used to being able to listen, think about solving problems, and deepening writing procedure text material through repetition.

This is in accordance with Simamora's opinion (2019: 32) that every learning model must have advantages and disadvantages. The advantages of the AIR learning model according to Fathurrohman (2018) are 1) Training students' listening and courage to express opinions (Auditory), 2) Training students to solve problems creatively (Intellectually), 3) Training students to remember the material that has been studied (Repetition), 4) students become more active and creative.

Furthermore, the AIR Learning Model is one of the learning models with a constructivist approach that emphasizes that learning must utilize all the senses that students have. This Learning Model assumes that learning will be effective if it pays attention to three things, namely Auditory, intellectually and Repetition. Auditory means learning must be through listening, listening, speaking, achieving, arguing, expressing opinions and responding. While intellectually means that learning must use thinking skills (mind-on), must be with

concentration of mind and practice using it through reasoning, investigating, identifying, finding, creating, constructing, solving problems and applying. Then, Repetition means repetition which means deepening, expanding, consolidating by means of students being trained through giving assignments or quizzes (Fauji & Winarti, 2013).

#### 4. CONCLUSION

Based on the research results obtained and their discussion, the following conclusions can be drawn.

1. There is any significant differences between pre test and post test of demonstration methods. Based on the paired t-test, the calculated t result is  $10.265 > t$  table 2.0301 (df 35, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts pre-test and post-test score of demonstration methods is significantly different.
2. There is any significant differences between pre test and post test of AIR (Auditory, Intellectually, and Repetition) learning model. Based on the paired t-test, the calculated t result is  $4.752 > t$  table 2.0301 (df 35, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts pre-test and post-test score of AIR (Auditory, Intellectually, and Repetition) learning model is significantly different.
3. There is any significant differences between post test using demonstration Method and AIR learning model. Based on the independent t-test, the calculated t result is  $6.605 > t$  table 1.9960 (df 67, two tail) and the significance level of the calculated t is  $0.000 < 0.05$  with a positive direction proving that ability of writing procedure texts post-test score of demonstration methods and AIR (Auditory, Intellectually, and Repetition) learning model is significantly different.
4. Student challenges when using the demonstration methods and the AIR (Auditory, intellectually and Repetition) learning model in writing procedure text:
  - a. The challenges faced by students when using the demonstration method are the lack of confidence in demonstrating the procedure of demonstration activities. In addition, several other challenges faced by students in the learning process are: (1) differences in interests and motivations, (2) different English language skills, (3) lack of motivation, (4) limited time constraints to complete several demonstrations during learning time, (5) some students have difficulty understanding the material.
  - b. The challenges that students may face in the Auditory, Intellectual and Repetition (AIR) learning model are understanding concepts. The AIR learning model is a learning method that prioritizes three aspects, namely: (1) Auditory, which is learning by listening, the challenge is that students are not used to listening to English so that what is heard is not the same as what is written, (2) Intellectual, which is learning by thinking and solving problems, the challenge is that students do not think sequentially, so they have to repeat in compiling procedural sentences in English, (3) Repetition, which is repetition to be more effective, the challenge is that repetition sometimes takes longer while learning time is limited.
5. The students' perception on demonstration method and AIR learning model in writing procedure text.
  - a. Student perceptions of the demonstration method, (1) students find it easier to understand learning material because they can play an active role because they receive clearer and more concrete teaching, (2) students feel happy with the learning process for the material being studied, (3) students are more helped to find answers by their own efforts based on facts or correct practices, (4) students have to spend their own money to buy demonstration practice materials, (5) by working together with friends, it becomes a fun activity in learning.
  - b. Students' perceptions of the Auditory, Intellectually, and Repetition (AIR) learning model are generally positive. This study shows that this model is effective in improving students' understanding and learning outcomes: (1) improving understanding of the concept of writing procedure text, (2) helping students understand writing procedure text material better, (3) providing stimulation and encouragement to students to actively participate in the learning process, (4) getting students used to being able to listen, think about solving problems, and deepening writing procedure text material through repetition.

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