

## The Effectiveness of Applying the Jigsaw Model in Learning Indonesian Exposition Texts for Class VIII State Junior High School 4 Sendana, Majene Regency

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### Abstract

This study aims to describe the effectiveness of the application of the jigsaw model in learning to write Indonesian exposition texts for class VIII SMP Negeri 4 Sendana in Majene. The type of research used is a quasi-experimental type experiment with two groups, namely the control group and the experimental group who were given a pretest and posttest. These two groups aim to prove whether the jigsaw learning model is effectively used or not in class VIII of SMP Negeri 4 Sendana. Before implementing Jigsaw Model, the results of the study suggest less successful, as shown by the 17 pupils who can only answer the questions that have been presented. As demonstrated by 51 students who were able to answer questions, the outcomes of studying exposition texts using the jigsaw learning approach in class VIII were successful.

**Keywords:** Effectiveness, Application, Jigsaw Learning Model

### Introduction

Language is a means of conveying messages and communicating. Language as a means of delivering information can be in the form of spoken language or written language. Therefore, one of them is written language in the learning process to be very important, because all areas of human life cannot be separated from writing activities. Writing skill is someone's skill in expressing ideas in writing. Writing skills need to be improved as a basis for expressing ideas and ideas in written form, because writing skills are often abandoned. Therefore, it can be concluded that writing skills are not only activities of providing ideas and ideas in written form, but also one's ability to produce more specific thoughts.

According to Djumingin (2011) that the language learning approach is a set of assumptions or theoretical frameworks about the nature of language, language teaching, and language learning that underlies the preparation of a particular language teaching model. The approach is axiomatic (can be accepted as truth without proof) which states a stance, philosophy, belief, but does not have to be proven (Bhandari, 2020). Hasib et al. (2021) suggest that students will learn less effective when taught in a monotonous learning environment and therefore require teacher to employ more creative teaching strategy.

In connection with learning to write at the level of SMP/MTs Class VIII Curriculum 2013 in which there are Basic Competencies (KD), namely studying the contents of the exposition structure (in the form of popular scientific articles from newspapers/magazines) listening or reading and presenting ideas of opinions in the form of an exposition test in the form of popular articles (in the environment, social crises, diversity, etc.) orally and in writing by paying attention to the linguistic structure, oral affect.

One of the innovative learning models offered can provide flexibility to students' activities and at the same time can develop writing skills, especially writing exposition texts, namely by applying the jigsaw type cooperative learning model (Manoe, 2020).

This learning model is one of cooperative learning where learning through the use of small groups of students who work together in maximizing learning conditions to achieve learning objectives and get a maximum learning experience, both individual experience and group experience. In this type of jigsaw cooperative learning, each student becomes a member of 2 groups, namely members of the home group and members of the expert group.

The jigsaw learning model is a cooperative learning technique where students play an active role in learning, not the teacher who has greater responsibility in the implementation of learning (Igel & Urquhart, 2012). The purpose of this jigsaw learning model is to develop teamwork, cooperative learning skills, and master in-depth knowledge that is not obtained if they try to learn all the material individually (Ghufron & Ermawati, 2018; Camacho-Minuche et al., 2021). Through this model, students share knowledge and help each other. Cooperation between students will determine the effectiveness of the learning that takes place. In addition to cooperation, teacher control and proper division of tasks for each student are other important factors that determine the success of applying the jigsaw model in writing expository texts.

According to Slavin quoted by (Arif Rohmat, 2017) the jigsaw type is one type of cooperative learning where learning is through the use of small groups of students who work together and maximize learning conditions to achieve learning goals and get the maximum learning experience, both individual and group experiences. In jigsaw learning, each student becomes a member of two groups, namely, members of the home group and members of the expert group. Every member. groups have the potential to earn group awards. Awards are obtained based on the individual performance of each group.

According to Slavin, in the book, Suku Arsa (2019) states that the Jigsaw model is one of the cooperative learning models. According to (Huda, 2017), Jigsaw was first developed by Aronson, then this model has two additional versions, namely Jigsaw II developed by Slavin and Jigsaw III developed by Kagan. In the Jigsaw model, students learn in two groups, namely the home group and the expert group. In expert groups, students discuss with each other about a topic. After that, they return to their original group to teach the topic to their group mates.

### **Jigsaw Model Cooperative Steps**

According to Rusman, in the book Suka Arsa, (2019) as follows; (a) Students are grouped with 4 students; (b) Each person on the team is given different materials and tasks; (c) Members of different teams with the same assignment form a new group (expert group) to discuss their sub-chapters; (d) After the expert group has discussed, each member returns to the original group and explains to the group members about the sub-chapters or materials they master; (e) Each expert team presents the results of the discussion; (f) Discussion; (g) Closing.

### **Advantages and Disadvantages of Jigsaw Cooperative Model**

The advantages of learning the Jigsaw model according to Shoimin (2021) are as follows: Enables students to develop creativity, ability, and problem-solving power according to their own will. The relationship between teacher and student runs in a balanced and possible way learning atmosphere becomes very familiar so as to allow harmony. Motivate teachers to work more actively and creatively. Able to combine various learning approaches, namely class, group, and individual approaches.

Shoimin (2021) revealed that there are shortcomings in the Jigsaw model as follows. If the teacher does not remind students to always use cooperative skills in their respective groups, it is feared that the group will get stuck in carrying out discussions. If there are less group members, it will cause problems. It takes longer time, especially if the spatial arrangement is not well conditioned so it takes time to change positions which can cause noise.

### **Methods**

This research is a type of quantitative research using quasi-experimental type of experiment, this type of experiment is characterized by the presence of two groups in the research design, namely the experimental group and the control group. The experimental group were students of Class VIII.b of SMP Negeri 4 Sendana with the application of the jigsaw model and the control class were students of Class VIII.c of Class VIII of SMP Negeri 4 Sendana. with conventional learning methods.

This research was conducted at SMP Negeri 4 Sendana Kab. Majene. The population of this research is the students of SMP Negeri 4 Sendana in this case represented by class VIII (eight). The sample is taken from the population using random sampling technique through a school approach. The population of this research is students of SMP Negeri 4 Sendana in this case represented by class VIII. The research population is all students of Class VIII SMP Negeri 4 Sendana. consisting of 119 students divided into 4 classes, which were selected using random sampling technique. So the sample in this study was 64 people according to the total population of 119 people. obtained by determining the sample from the total population. In this sample is class VIII.B as many as 32 students. 12 female students and 20 male students while class VIII. C as many as 32 students. 14 female students and 18 male students. Variables are objects of research or are the point of attention of a study (Arikunto, 2013) in this study there are two types of variables, namely independent variables and dependent variables. The data collection technique in this study is the research data collected by following the procedure: Pre-Test, Treatment, and Final Test.

### **Pretest**

The procedure taken at the initial stage of collecting research data is to give initial tests to the two groups, namely: the experimental class and the control class. In the initial test, students are given questions in the form of essays, which consist of several questions. The main purpose of giving this test is to determine the students' initial ability in writing exposition texts before being given treatment.

### **Treatment**

The activities taken at this stage are giving treatment to the experimental class by applying the Jigsaw learning model with the material of writing exposition texts for the control class by applying conventional methods in writing exposition texts.

### **Posttest**

At this stage, experimental class students were given several questions in the form of essays using the Jigsaw learning model in learning to write expository texts. The control class students have been given several questions in the form of essays using different learning models, namely methods. The posttest was given to the experimental class and the control class to find out whether or not the use of the jigsaw model learning model was in learning to write exposition texts in class VIII of SMP Negeri 4 Sendana.

### **Results and Discussion**

Based on the results of the analysis of the test data below, the control class at the initial stage (pretest) with 32 student worksheets analyzed obtained a picture that is, no student got a score of 100 as the maximum value. The highest score was 84 obtained by one student (3%) and the lowest score was 52 obtained by three students (9%).

Through descriptive statistical analysis data, the students' scores for writing expository texts from the lowest score to the highest score were: a score of 52 was obtained by three students (9%); the score of 54 was obtained by two students (6%); the value of 58 was obtained by one person (3%); a score of 60 was obtained by one student (3%); a score of 62 was obtained by one student (3%); a score of 64 was obtained by three students (9%); a score of 66 was obtained

by one student (3%); a score of 70 was obtained by two students (6%); the value of 72 was obtained by five people (16%); a score of 74 was obtained by one student (3%); a score of 76 was obtained by four students (13%); a score of 78 was obtained by two students (6%); a score of 80 was obtained by three students (9%); the value of 82 was obtained by two students (6%); the value of 84 was obtained by one student (3%). The minimum score obtained by students is 52 and the maximum value obtained by students is 84. The average value of students is 69.5

Table 1. Frequency Distribution and Percentage of Control Class (VIII.C) Pretest Values

No	Student Grades	Frequency	Percentage (%)
1	52	3	9%
2	54	2	6%
3	58	1	3%
4	60	1	3%
5	62	1	3%
6	64	3	9%
7	66	1	3%
8	70	2	6%
9	72	5	16%
10	74	1	3%
11	76	4	13%
12	78	2	6%
13	80	3	9%
14	82	2	6%
15	84	1	3%
<b>Sum</b>		<b>32</b>	<b>100%</b>
<b>Minimum Value</b>		<b>52</b>	
<b>Maximum Value</b>		<b>84</b>	

Based on the results of this data analysis, the test below is the control class at the final stage (posttest) with 32 student worksheets being analyzed, which shows that there are no students who get a score of 100 as the maximum value. The highest score was 84 obtained by one student (6%) and the lowest score was 54 obtained by one student (3%).

Through descriptive statistical analysis data, the acquisition of students' exposition text writing scores from the lowest to the highest score, namely: a score of 54 obtained by one student (3%); a score of 64 was obtained by two students (6%); the value of 66 was obtained by two people (6%); a score of 68 was obtained by one student (3%); a score of 70 was obtained by one student (9%); a score of 72 was obtained by three students (9%); a score of 74 was obtained by two students (6%); a score of 76 was obtained by three students (9%); a score of 78 was obtained by two people (6%); a score of 80 was obtained by four students (13%); a score of 82 was obtained by four students (13%); the value of 84 was obtained by two students (6%); The minimum score obtained by students is 54 and the maximum value obtained by students is 84. The average value of students is 74.31.

Table 2. Distribution of Frequency and Percentage of Control Class Posttest Scores

No	Students Score	Frequency	Percentage (%)
1	54	1	3%
2	64	2	6%
3	66	2	6%
4	68	1	3%
5	70	3	9%
6	72	3	9%

7	74	5	16%
8	76	3	9%
9	78	2	6%
10	80	4	13%
11	82	4	13%
12	84	2	6%
<b>Total</b>		<b>32</b>	<b>100%</b>
<b>Minimum Score</b>		<b>54</b>	
<b>Maximum Score</b>		<b>84</b>	
<b>Mean</b>		<b>74,31</b>	

Based on the results of the test data analysis below, the experimental class at the initial stage (pretest) with 32 student worksheets analyzed obtained a picture that is, no student got a score of 100 as the maximum value. The highest score was 84 obtained by one student (3%) and the lowest score was 56 obtained by one student (3%).

Through descriptive statistical analysis data, the acquisition of students' exposition text writing scores from the lowest to the highest score, namely: a score of 56 obtained by one student (3%); a score of 58 was obtained by one student (3%); the score of 60 was obtained by two people (6%); a score of 64 was obtained by two students (6%); a score of 66 was obtained by three students (9%); a score of 68 was obtained by one student (3%); a score of 70 was obtained by six students (19%); a score of 72 was obtained by five students (16%); the value of 74 was obtained by two people (6%); a score of 76 was obtained by four students (13%); a score of 78 was obtained by three students (9%); a score of 80 was obtained by one student (3%); a score of 84 was obtained by one student (3%); The minimum score obtained by students is 56 and the maximum value obtained by students is 84. The average value of students is 70.56.

Table 3. Frequency Distribution and Percentage of Experimental Class Pretest Values (VIII.B)

No	Student Grades	Frequency	Percentage (%)
1	56	1	3%
2	58	1	3%
3	60	2	6%
4	64	2	6%
5	66	3	9%
6	68	1	3%
7	70	6	19%
8	72	5	16%
9	74	2	6%
10	76	4	13%
11	78	3	9%
12	80	1	3%
13	84	1	3%
<b>Sum</b>		<b>32</b>	<b>100%</b>
<b>Minimum Value</b>		<b>56</b>	
<b>Maximum Value</b>		<b>84</b>	
<b>Mean (Average)</b>		<b>70,56</b>	

Based on the results of the analysis of the control class test data at the final stage (posttest) with 32 student worksheets analyzed, it was obtained that there were no students who scored 100 as the maximum score. The highest score was 86 obtained by one student (3%) and the lowest score was 62 obtained by one student (3%).

Through descriptive statistical analysis data, the acquisition of students' exposition text writing scores from the lowest to the highest score, namely: a score of 62 obtained by one student (3%); a score of 64 was obtained by one student (3%); the value of 66 is obtained by one person (3%); a score of 70 was obtained by two students (6%); a score of 72 was obtained by four students (13%); a score of 74 was obtained by five students (16%); a score of 76 was obtained by one student (3%); a score of 78 was obtained by four students (13%); a score of 80 was obtained by seven people (22%); the value of 82 was obtained by two students (6%); a score of 84 was obtained by three students (9%); a score of 86 was obtained by one student (3%); The minimum score obtained by students is 62 and the maximum value obtained by students is 86. The average value of students is 76.25.

Table 4. Frequency Distribution and Percentage of Experimental Class Posttest Values (VIII.B)

No	Student Grades	Frequency	Percentage (%)
1	62	1	3%
2	64	1	3%
3	66	1	3%
4	70	2	6%
5	72	4	13%
6	74	5	16%
7	76	1	3%
8	78	4	13%
9	80	7	22%
10	82	2	6%
11	84	3	9%
12	86	1	3%
<b>Sum</b>		<b>32</b>	<b>100%</b>
<b>Minimum Value</b>		<b>62</b>	
<b>Maximum Value</b>		<b>86</b>	
<b>Mean (Average)</b>		<b>76,25</b>	

### Normality Test

In the normality test, the terms or conditions that must be met are the significance value or p-value  $> 0.05$ . Data in the form of student scores comes from a population that is normally distributed if it has met these terms or conditions. The research hypothesis is as follows.

H1 : The sample comes from a normally distributed population.

H0 : The sample comes from a population that is not normally distributed.

From the data above, the KS value in the control class is 0.163 with a P-Value value of 0.031  $> (0.05)$  which means that the sample data in the population is normally distributed. So that the normality test in the control class is fulfilled. Meanwhile, the KS value in the experimental class is 0.153 with a P-Value value of 0.054  $> (0.05)$  which means that the sample data in the population is normally distributed. So that the normality test in the experimental class is fulfilled.

Based on the results of the analysis of the normality test, it can be concluded that the data obtained from the pretest results of the control class and the experimental class came from a normally distributed population, then:

H1 : The sample comes from a normally distributed population.

So based on the results of the analysis of the normality test, it can be concluded that the data obtained from the pretest results of the control class and the experimental class came from a normally distributed population.

### **Homogeneity Test**

Through inferential statistical data analysis, the second prerequisite that must be met before conducting further data analysis tests is the homogeneity of data variance. The requirement for homogeneity of variance is that if  $p\text{-value} \geq 0.05$ , then the data is declared homogeneous which is carried out at the initial stage (pretest) of the control class and the experimental class. The homogeneity test of the data population variance for this study population, using the Homogeneity of Variances Test.

From the analysis of data on SPSS using the calculation of the homogeneity of population variance, the  $p\text{-value} = 0.008$  was obtained. The conditions that must be met as a condition for the data to come from a homogeneous (same) population are significance or  $p\text{-value} > , = 0.05$ . The  $p\text{-value} = 0.008 > = 0.05$ , it can be concluded that the population variance comes from the same population (homogeneous).

### **Hypothesis Test**

The hypothesis test used is an inferential statistical analysis technique of independent samples t-test. After the analysis prerequisite tests were previously carried out, namely, normality test and homogeneity test, the results obtained that the data came from a normally distributed and homogeneous population. The value used as a guide in the independent t-test, namely the final score of students after the posttest was carried out in the experimental class and control class.

The results of inferential statistical analysis showed that the coefficient of difference between the value of writing expository text using the Jigsaw Learning model and the value of writing expository text without using the Jigsaw Learning model for class VIII students obtained a t-count value of 0.000 with degrees of freedom 0.0 and significance or p-value (2-tailed) = 0.000. Because the  $p\text{-value} < 0.05$  or  $0.000 < 0.05$ , the alternative hypothesis (H1) is accepted and the null hypothesis (H0) is rejected.

### **Conclusion**

The results of learning exposition texts before applying the jigsaw learning model in class VIII are less effective, as evidenced by 17 students who are only able to answer the questions that have been given. The results of learning exposition texts after applying the jigsaw learning model in class VIII were effectively used, as evidenced by 51 students who were able to answer questions. which has been given. The jigsaw model in expository text learning can be said to be effectively used as evidenced by the attached data that the value of  $p(\text{sig.}(2\text{-tailed}))$  is  $0.000 < 0.05$  indicating that the students' learning outcomes of writing exposition texts after being taught with the Jigsaw Learning Model are more than 75 This means that H0 is rejected and H1 is accepted, i.e. the average result of learning to write expository texts in the post-test with the Jigsaw Learning Model is more than the Minimum Completeness Criteria (KKM).

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