



Application of Jigsaw-Type Cooperative Learning Model in Improving Short Story Writing Learning in Grade VIII Students at Junior High School

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Abstract

This study aims to improve the ability to write short stories for grade VIII students of SMP Negeri 5 South Banawa through the application of a Jigsaw-type cooperative learning model. The background of this research departs from the low ability of students to write short stories, which is caused by a lack of interest, imagination, and the application of a learning model that is still teacher-centered. The type of research used is quantitative research with a descriptive method. The research subjects consisted of 13 grade VIII students of SMP Negeri 5 Banawa Selatan for the 2025/2026 school year. Data collection techniques are carried out through observation, documentation, and tests (pre-test and post-test). The results of the study showed an increase in short story writing skills after the application of the Jigsaw-type cooperative learning model. The average score of the students was 51.07, while the average score of the post-test increased to 80.98. The results of the t-test analysis showed that the calculated t-value of 10.55 was greater than the t-table of 1.782 with a significant level of 0.05, so the research hypothesis was accepted. Thus, the application of the Jigsaw-type cooperative learning model has a significant effect on improving the ability to write short stories for grade VIII students of SMP Negeri 5 South Banawa.

Keywords: *cooperative learning model, Jigsaw type, short story writing ability, junior high school students.*

Introduction

Writing is one of the language skills that must be mastered by junior high school (SMP) students. Writing skills have a very important role in students' lives. By writing, students can pour out their ideas and feelings for others to read. The basic competency of the Indonesian subject of the literary aspect of junior high school grade VIII for the sub-aspect of writing is explained that students must be able to write short stories starting from events that have been experienced (Telaumbanua, 2020). Writing a short story is narrating various events, both real and fictional, in the form of writing that is read in about 10 minutes or consists of 500 to 5000 words whose events are deliberately arranged in chronological order. (Telaumbanua, 2020).

To achieve these competency standards, Indonesian Language and Literature learning programs are not just teaching literary theories, but rather emphasizing the practice of writing so that the demands of these competency standards can be achieved. Given the importance of short story writing skills for students, students' difficulties in this activity must be overcome. Efforts that can be made include preparing learning scenarios that attract students' interest with the selection of simple, medium themes and finally updated (contemporary) themes.

The ability to write short stories that students have is not the same. Some students are able to write short stories well and some other students are still not able to write short stories well. This condition is exacerbated by the low interest in writing of students. This opinion is strengthened by the opinion of Badudu (Arum, 2020) that students' writing skills are still low, characterized by (1) the frequency of writing activities carried out by students is very low, (2) the quality of students' writing is very poor, (3) low enthusiasm in participating in Indonesian learning in general and writing learning in particular, and (4) low learning creativity of students during writing teaching and learning activities

Based on observations made during the preliminary study at SMP Negeri 5 South Banawa, information was obtained that students' ability to write short stories. Not a few students experience obstacles in developing short story writing skills. These obstacles are that students' imagination is still lacking, the diction used in writing short stories varies, difficulties in determining themes, and less ability to develop ideas. Another factor that causes the low desire of students to write short stories is the model used in learning to write short stories because without a model that is used to support and attract students' attention which is actually very important to be presented to increase students' creativity and imagination in expressing the feelings of ideas that actually exist in the potential of each student so that it can make it easier for them to tell stories that will be poured or presented in the form of Writing that can later be a series of very beautiful words even though they are relatively short.

For this reason, efforts are needed to overcome these conditions. Teachers are expected to choose a learning model that emphasizes more on direct learning that is more concrete, so that students' writing skills are improved. There are various learning models that can be used to improve students' learning ability, namely Cooperative Learning (CL), Contextual Teaching Learning (CTL), (PBS), and others. Previous research has shown that the Jigsaw-type cooperative learning model is effective in improving students' learning abilities. One of them is, Sri Handayani, et al (2020) have also conducted a study entitled "The Application of the Jigsaw Model in Short Story Writing Skills in Class XI" the results obtained prove that the implementation of the Jigsaw learning model can improve short story writing skills.

Research with a learning model with the same model has also been conducted by (Sugiarti, 2020) with the title "Efforts to Improve the Ability to Analyze the Intrinsic Elements of Short Stories through the Application of the Jigsaw Method in Indonesian Language Subjects Class X SMAS NU Sumber Agung" the results obtained are that the application of the Jigsaw learning model can improve the ability to determine the intrinsic elements of short stories. One way to apply this type of Jigsaw learning is through group discussions, which are divided into expert groups. In order for the implementation of this activity to be optimal, students are directed to find for themselves the purpose and purpose of the concept or topic that they are part of during the learning process (Amin, 2020; Maarif, 2019).

So that the alternative type of learning used by the researcher is the Jigsaw learning type, because the Jigsaw-type learning model is a type of learning that tries to unite various concept information that is randomly scattered so that it becomes a single concept information that can be understood in its entirety. This type involves students to do their own learning activities so that what is obtained in the learning process will be a faithful memory and students also have their motor skills and abilities. The application of Jigsaw-type cooperative learning is also one way to increase teachers' creativity in preparing the teaching and learning process so that students do not feel bored, the learning environment becomes more effective. This activity is carried out to prove facts and concepts, encourage students' curiosity and improve students' learning abilities.

This research focuses on how to apply the Jigsaw-type cooperative learning model in learning to write short stories in grade VIII students at SMP Negeri 5 South Banawa?

Method

This study uses a type of quantitative research. According to Sugiyono (2020), quantitative research can be interpreted as research based on the philosophy of positivity, used to research on certain populations or samples, data collection using quantitative data analysis research instruments with the aim of testing previously formulated hypotheses.

A qualitative descriptive approach that aims to understand and describe in depth the application of multicultural concepts in Indonesian language learning. The qualitative method was chosen because it was able to reveal the meaning behind the social phenomena that occur in the classroom, especially the experiences and views of students and teachers. As stated by Sugiyono (2022), the qualitative approach produces data in the form of written or spoken words from people and observed behaviors. In this context, the researcher focuses on the interpretation of social interactions, learning strategies, and multicultural attitudes that arise in teaching and learning activities.

The research was carried out in the class of SMP Negeri 5 South Banawa. The subject of this study is grading VIII students for the 2025/2026 school year with a total of 13 students consisting of 11 male students and 2 female students. The data sources in this study consist of primary data and secondary data. The primary data source in this study is grading VIII students of SMP Negeri 5 Banawa Selatan for the 2025/2026 school year who are the subject of the research. Primary data was obtained directly from the results of the short story writing test (pre-test and post-test) as well as observation of student and teacher learning activities during the learning process with the application of a Jigsaw-type cooperative learning model. Meanwhile, secondary data sources in this study were obtained from various relevant literature and documents, such as Indonesian textbooks for the Independent Curriculum, results of previous research, scientific articles, and school documents.

In the data collection process, the researcher uses three main techniques, namely observation, documentation, and testing.

- a. Observation is an observation technique that is carried out directly and carefully on the symptoms of a situation in a place. Observation techniques are used to observe the activities of teachers and students. Observation is carried out by directly looking at teachers and students during learning activities.
- b. Documentation is used so that this research takes place validly, so the researcher uses documentation as a tool to analyze the results of the research, including observation sheets and photos of teachers and students who are doing learning activities
- c. Test, technique or method of data collection are ways that can be used by researchers to collect data. This is in line with the opinion (Halik et al 2019) that tests are a tool to measure student learning outcomes by providing a series of questions or tasks that must be done by students. As in this study, the researcher provides a pre-test to measure students' writing skills before treatment. After providing a pre-test, the research applied treatment in the form of a short story writing learning method in the teaching and learning process in the classroom. The researcher gave treatment to students during 4 meetings. In this treatment, the researcher teaches students how to write short stories that are in accordance

with the aspects of writing skills by using the short story writing learning method. Furthermore, give a Post-test to students at the last meeting after students are given material. Post-test is the last research session in the classroom. Post-tests are used to see whether students' short story writing skills improve or not after being given material. The type of test used in the post-test is the same as the test used in the pre-test.

Research instruments are tools used to help researchers obtain data. In this case, the data obtained through the value of students' creativity in improving the ability to write short stories through a Jigsaw-type cooperative model. Furthermore, the value in the form of numbers will be described so as to produce conclusions about the application of the jigsaw-type cooperative learning model to improve the ability to write short stories in grade VIII students of SMP Negeri 5 South Banawa. In the data analysis technique, there will be several steps that the researcher will take, namely calculating individual student scores, average scores, and standard deviations. In this case, the researcher uses the formula proposed by (Arikunto, 2019 p.308) The first step is for the researcher to analyze the test. This is to find out the individual scores of pre-test and post-test students. The researcher used the following formula

$$\Sigma = \frac{X}{N} \times 100$$

Information:

Σ = Standard Value
 X = Raw Value
 n = maximum value
 100 = Boarding Value

After obtaining the scores of each student, the researcher calculated the average score of each student by analyzing data from the pre-test and post-test results. The researcher uses the formula (2019, p.315) as follows:

$$Mx = \frac{\Sigma Fx}{N}$$

Information:

M = Pre-test average score
 ΣFx = The number of grades earned by all students
 N = Number of students

In the next step, the researcher calculates the average value of the average difference between pre-test and post-test (Md) results. In this study, the researcher

used the following formula:

$$Md = \frac{\sum d}{N}$$

Information:

Md = Average value of the deviation of per-test and post-test results

$\sum d$ = The sum of the difference from the average score of the results of the per-test and post-test

N = Number of students

Furthermore, the researcher calculated the number of square deviations from drama learning (Tragedy) using the role-play learning method to improve the speaking skills of grade VIII students of SMP Negeri 12 Palu. It can be calculated with the following formula:

$$\sum d^2 = \sum d^2 - \frac{(\sum d)^2}{N}$$

After obtaining the deviation value from all grade VIII students of SMP Negeri 5 Banawa Selatan, the researcher applied the t-calculation formula (2019, p. 354) as follows:

$$t = \frac{Md}{\sqrt{\frac{\sum d^2}{N(N-1)}}}$$

Information:

t = t-count

Md = Average pre-test and post-test scores

N = Number of students

Hypothesis testing is an assumption or temporary answer to a question that arises in research. (Sugiyono, 2019) stated that the answer to the formulation of the research problem is based on empirical facts obtained through data collection. In this study, the researcher tested the research hypothesis based on the results of data analysis to see whether the hypothesis in this study was successful or not.

Result

The researcher presented data from the research that had been conducted. This data collection starts from July 22, 2025 to August 11, 2025. The data collection technique in this study is in the form of tests consisting of pre-test and post-test. The

treatment was given by the researcher twice a week, namely on Wednesday and Saturday, from July 23, 2025 to August 9, 2025. The researcher provides teaching to grade VIII by dividing students into three groups, each group consisting of four students divided into expert groups. At each meeting, each group has been shared by the researcher. Then each group was given a worksheet (LKPD) which was then shared by the researcher. Then each group of experts studied their respective materials after which they returned to the original group. In carrying out the treatment, the researcher provided time for one hour of lessons to teach.

1. Pre-test results

The researcher conducted a pre-test on July 23, 2025 for grade VIII of SMP Negeri 5 Banawa Selatan which has been divided into groups, consisting of three groups. The results of the pre-test for all grade VIII students of SMP Negeri 5 South Banawa are presented in the following table.

Table 4.1 Pre-Test Results for Class VIII State Junior High School 5 South Banawa

Not.	Initials	Category Type									Value that Obtained	Max Value	Value Standard
		Theme	Structu	Alur	Charact	Backgr	Kreativ	Langua &	Dialog	tions/St			
1	AMK	3	2	4	3	3	3	3	2	2	26	36	72.22
2	AR	2	1	1	2	3	1	1	2	1	14	36	38.88
3	THA T	2	1	2	1	3	2	1	1	3	16	36	44.44
4	HL	4	2	3	1	2	1	1	2	1	17	36	47.22
5	HN	3	3	1	2	2	1	1	1	2	16	36	44.44
6	KEEP	1	2	3	2	2	1	2	2	2	17	36	47.22
7	JU	2	1	2	3	1	2	1	2	1	15	36	41.66
8	MS	2	2	2	2	2	1	1	1	2	15	36	41.67
9	Nw	4	2	1	2	1	2	2	2	1	17	36	47.22
10	RE	3	3	4	4	3	3	1	3	3	27	36	75
11	SEE	2	1	1	3	3	1	3	1	2	17	36	47.22
12	WA	3	2	4	4	4	3	2	3	1	26	36	72.22
13	GH	2	1	3	1	1	1	2	3	2	16	36	44.44
	Entire											663.888	
	Average Score											51.068	

Based on the table, it can be seen that the highest value is 75 and the lowest value is 38.88. If referring to the KKM score, there were only three students who passed the pre-test and ten students who did not pass. The results of the study

showed that three students achieved the criteria of being quite capable. After getting the individual scores of all students, the researcher calculates the average score of the pre-test using the following:

$$M_x = \frac{\sum F^X}{N}$$

$$= \frac{663.888}{13}$$

$$= 51,068$$

2. Post-Test Results

The research conducted a post-test on Saturday, August 9, 2025 for the three groups of grades VIII of SMP 5 Banawa Selatan. The post-test results are presented in the following table

Table 4.2 Post-Test Results for Class VIII SMP Negeri 5 South Banawa

No.	Initials	Category Type									Earned Value	Max Value	Value Standard
		Theme	Structur	Alur	Characte	Backgro	Creative	Languan e & Style	Dialog	Unity of the story			
1	AM K	4	2	4	4	4	4	3	3	2	30	36	83.33
2	AR	4	2	3	3	4	2	2	3	2	25	36	69.44
3	TH AT	3	2	4	3	4	3	3	2	3	30	36	75
4	HL	4	3	4	3	4	3	3	3	3	30	36	83.33
5	HN	4	4	3	3	3	2	3	4	3	29	36	80.56
6	KE EP	3	3	4	4	4	2	3	3	2	28	36	83.33
7	JU	3	2	3	3	3	3	3	3	4	27	36	75
8	MS	3	3	3	4	3	3	3	3	4	29	36	80.56
9	Nw	4	3	3	4	3	4	4	2	3	30	36	83.33
10	RE	4	4	4	4	4	3	3	3	4	33	36	91.67
11	FRI	3	3	4	4	4	2	2	3	3	28	36	77.78
12	WA	4	4	4	4	4	4	3	3	2	32	36	88.89
13	GH	3	3	4	3	3	3	3	4	3	29	36	80.56
Entire												1052.777	
Average Score												80.982	

Based on the table, it can be seen that the highest score is 91.67 and the lowest score is 75. Based on the KKM score, 13 students passed the post-test and five students did not pass. The results of the study showed that one student reached the

criteria of being quite capable, five students reaching the criteria of being capable, and one student reaching the criteria of being very capable. After obtaining the individual scores of students of both groups, the researcher calculated the average score using a formula and the results were:

$$\begin{aligned} M &= \frac{\sum F^x}{N} \\ &= \frac{1052.777}{13} \\ &= 80,982 \end{aligned}$$

After comparing the results of the two groups, the researchers found that there was a difference in the average score between the pre-test and post-test after being given the treatment. The pre-test score was 51,068 and the post-test score given significant treatment was 80,982. This shows that there is a considerable difference and can be seen from the number of students who passed the KKM, which previously only three students who graduated with the criteria of being able to increase to 9 students with the criteria of being able to do so, and very capable. Next, calculate the average value from the average difference in pre-test results.

$$\begin{aligned} Md &= \frac{\sum d}{N} \\ Md &= \frac{29,91}{13} \\ Md &= 2,30 \end{aligned}$$

3. Quadratic Deviation

After obtaining the results of the pre-test and post-test average scores, the researcher calculates the deviation and the squared deviation. To find out if there is a significant difference between the pre-test and post-test results. The results are presented in the following table:

Table 4.3 Deviation of Grade VIII Students of SMP Negeri 5 Banawa Selatan

No.	Initials	Student Grades		Deviation	X2
		Pre-test (X1)	Test-post-test(X2)	(X2-X1)	
1	AMK	72.22	83.33	11.11	123.4321
2	AR	38.88	69.44	30.56	933.9136
3	THAT	44.44	75.00	30.56	933.9136
4	HL	47.22	83.33	36.11	1303.9321
5	HN	44.44	80.56	36.12	1304.6544
6	KEEP	47.22	83.33	36.11	1303.9321
7	JU	41.66	75.00	33.34	1111.5556
8	MS	41.66	80.55	38.89	1512.4321
9	Nw	47.22	83.33	36.11	1303.9321
10	RE	75.00	91.67	16.67	277.8889
11	SEE	47.22	77.77	30.55	933.3025
12	WA	72.22	88.88	16.66	277.5556
13	GH	44.44	80.55	36.11	1303.9321
		Entire		388.90	12624.3768
		Average		29.92	1803.4824

Source: Author's analysis results, 2025

By looking at the table above, it can be seen that the highest deviation value (D) is 38.89 and the lowest deviation value is 11.11. Furthermore, the highest squared deviation value (D²) is 1512.4321 and the lowest squared deviation value is 123.4321. After knowing the deviation and square deviation in the pre-test and post-test, the researcher calculated the number of deviations from all grade VIII students at SMP Negeri 5 South Banawa using the following formula:

$$\begin{aligned} \sum d &= \sum d - \frac{\sum d^2}{N} \\ &= 3.889 - \frac{15.125}{13} \\ &= 3,889 - 1,16346154 \\ &= 2,72 \end{aligned}$$

By looking at the results above, it can be shown that the deviation value of all pre-test and post-test students is 2.72. Next, the researcher applied the t-count formula to show how effective the treatment was. The researcher used the following formula:

$$t = \frac{Md}{\sqrt{\frac{\sum d^2}{N(N-1)}}$$

$$t = \frac{2.30}{\sqrt{\frac{2.27^2}{13(13-1)}}$$

$$t = \frac{2.30}{\sqrt{\frac{7.3984}{156}}}$$

$$t = \frac{2.30}{\sqrt{0,047425641}}$$

$$t = \frac{2.30}{0.218}$$

Therefore, the t-count of the assessment is 10.55

4. Pengujian Hypothesis

To find out whether the treatment given is effective or not, a hypothesis test is carried out. If the t-count value is greater than the t-table value, then the hypothesis in this study is accepted or the use of the learning method of playing the game in this drama material has a significant effect on improving students' speaking skills. Meanwhile, if the t-count is smaller than the t-table value, the hypothesis in this study is rejected or the use of role-playing learning methods in drama material does not have a significant effect on improving students' speaking skills. To find out the acceptance or rejection of the hypothesis. In this case, the researcher used the formula proposed by Jainuri, M (2022). The researcher used the following formula:

$$\text{Degree of freedom (df)} = N-1$$

$$= 13-1$$

$$= 12$$

Significant Rate = 0.05

Table T (df = 12, $\alpha=0.05$) = 1.782

The results of the data analysis showed that the t-count value was 8,618. With a significance level of 0.05 and a degree of magnitude (df=12), a t-table of 1.782 was obtained

Because:

T-Count (10.55) > T-Table (1.782)

So, the research hypothesis is accepted. This shows that the jigsaw-type cooperative learning model has a significant effect on improving the writing ability of short stories for grade VIII students at SMP Negeri 5 Banawa Selatan.

The purpose of this study is to improve the ability to write short stories in grade VIII students of SMP Negeri 5 South Banawa through a jigsaw-type cooperative learning model in short story material. Data analysis showed that there was an improvement in students' short story writing skills as a result and intervention. Statistically it was found that the t-value is greater than the t-table value. Thus, the use of a jigsaw-type cooperative learning model in short story material can improve students' short story writing skills.

Furthermore, when calculating the pre-test in grade VIII of SMP Negeri 5 Banawa Selatan, the researcher found the number of students who did not pass because they obtained lower scores than before the treatment was carried out. From the results of the pre-test, it is known that grade VIII students of SMP Negeri 5 Banawa Selatan are not able to write short stories and many students are still not brave in expressing ideas. In addition, researchers found that students were more likely to feel bored with the same learning model.

However, the intensity of the application of the jigsaw-type cooperative model as a learning method in short story writing materials shows that students have experienced significant changes. The researcher provided treatment to students during 4 meetings. In providing treatment, the researcher uses the independent curriculum book for junior high school grade VIII as teaching material to train students to write short stories properly and correctly. In addition, the researcher also explained about short stories. After being given treatment, the results of the post test showed significant changes. Therefore, this proves that the treatment carried out by the researcher has succeeded in making students write short stories well and correctly, especially those who are still less able or less confident in writing short stories.

Conclusion

The application of the jigsaw-type cooperative learning model as an effective learning model is used in learning, especially in short story writing to improve students' short story writing skills. grade VIII students of SMP Negeri 5 South Banawa. This can be seen from the results of data analysis that the average post-test score (80,982) is higher than the average pre-test score (51,068) so that it has undergone significant changes. In addition, this can also be proven by the value of t-table (1.782.). This means that the hypothesis of the researcher in this study is accepted.

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