

THE EFFECT OF USING JIGSAW STRATEGY ON THE ABILITY OF THE FIRST YEAR STUDENTS OF SMPN 1 PEKANBARU IN COMPREHENDING DESCRIPTIVE TEXTS

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Abstract: *This pre-experimental research was aimed to find out whether or not there was a significant effect of using Jigsaw Strategy on the ability of the first year students of SMPN 1 Pekanbaru in comprehending descriptive texts. The research design was pre-experimental research with one group pre-test and post-test design. The sample was VII HN chosen by using cluster sampling technique. The data were calculated by using Microsoft Excel 2010 and analyzed by using SPSS. The result of the data analysis showed that mean scores of the pre-test was 70.27 and the mean score of the post-test was 85.29. In other words, the mean scores of the post-test was higher than the pre-test. The result also showed that the value of t-test was higher than t-table ($13.880 > 2.034$) at significance level of 5%. It can be concluded that Hypothesis was accepted. Thus, there was a significant effect of using Jigsaw Strategy on the ability of the first year students of SMPN 1 Pekanbaru in comprehending Descriptive Texts. Several recommendations were given for students such as study in group like Jigsaw and be more focus to increase their vocabulary. In line with it, the teachers need to gave more attention on how to improve students' comprehension when implementing Jigsaw Strategy in the class.*

Key Words: *Effect, Jigsaw, Strategy, Descriptive Texts.*

PENGARUH DARI PENGGUNAAN STRATEGI JIGSAW PADA KEMAMPUAN SISWA TAHUN PERTAMA DI SMPN 1 PEKANBARU DALAM MEMAHAMI TEKS DESKRIPTIF

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Abstrak: Penelitian ini bertujuan untuk mengetahui apakah ada atau tidak pengaruh yang signifikan dari Strategi Jigsaw pada kemampuan siswa tahun pertama di SMPN 1 Pekanbaru dalam memahami teks deskriptif. Desain penelitian yang digunakan adalah pre-eksperimental dengan satu grup tes awal dan tes akhir. Sampel penelitian adalah kelas VII HN yang ditentukan dengan menggunakan teknik pemilihan kelompok. Data di hitung menggunakan Microsoft Excel 2010 dan di analisis menggunakan SPSS. Hasil menunjukkan bahwa nilai rata-rata tes awal adalah 70.27 dan nilai rata-rata tes akhir adalah 85.29. Dengan kata lain, nilai rata-rata tes akhir lebih tinggi dari nilai rata-rata tes awal. Hasil juga menunjukkan bahwa nilai t-test lebih tinggi daripada nilai t-tabel pada tingkat signifikan 5%. Itu artinya hipotesis diterima. Karena itu, terdapat efek yang signifikan dari penggunaan strategi Jigsaw terhadap kemampuan pada siswa tahun pertama di SMPN 1 Pekanbaru dalam memahami teks deskriptif. Beberapa rekomendasi diberikan untuk siswa seperti belajar secara berkelompok menggunakan Strategi Jigsaw dan lebih fokus untuk meningkatkan kosakata. Sejalan dengan hal itu, guru harus memberikan perhatian lebih untuk meningkatkan pemahaman siswa saat di aplikasikan Strategi Jigsaw di dalam kelas.

Kata Kunci: *Pengaruh, Jigsaw, Strategi, Teks Deskriptif*

INTRODUCTION

English is one of the languages that Indonesian students are required to be competent . The language competence is in terms of language systems such as sound and grammatical system and language skills. In order to be competent in English , the students learn it. They learn the language systems and the language skills. As one of the language skill, reading is also learn in learning English. The students may learn English through learning texts in various genres.

One of the genres learnt by the students at SMPN 1 Pekanbaru is descriptive texts. Based on the curriculum 2013 syllabus, the first year students of SMPN 1 Pekanbaru are required to study only one kind of text in the second semester that is descriptive text.

As one of the reading types, descriptive text is a part of recent target in teaching English for the first year students of junior high school and it is an important aspect for the students to learn as stated in the 2013 Curriculum as such text is included in the daily test, mid-test, semester test, and the National Examination. So it is important for the researcher to conduct this research which is expected to help students understand about descriptive text. The researcher therefore introduces Cooperative Learning method especially Jigsaw technique as one of the technique in Cooperative Learning method to measure the comprehension of the students in reading descriptive texts.

Based on interview in SMPN 1 Pekanbaru that had been done with the English teacher, students still have some problems in comprehending descriptive texts,such as ; meaning of vocabularies, and difficult to finding the main ideas that proved by students daily test.

Realizing the phenomena above, the appropriate reading technique in teaching reading should be developed in the classroom. In this context the researcher wants to apply Jigsaw technique. Based on the related studies of this research, teaching reading by using jigsaw technique could improve the students' reading comprehension. Jigsaw is said to be able to increase students' learning since; it is no threat for many students, it increased the amount of student participation in the classroom, it reduce the need for competitiveness, and it reduce the teacher's dominance in the classroom (Qiao Mengduo, 2010). Johnson (2009) also defined that Jigsaw reading technique is an efficient way for students to become engaged in their learning, learn a lot of material quickly, share information with other groups, minimize listening time, and be individually accountable for their learning. Jigsaw technique is a suitable way to motivate students in reading text. By using jigsaw technique, students acquire basic knowledge. Then, students apply that knowledge in their expert groups to discuss the guiding questions. It also gives every student a chance to be an expert.

I will carry out research entitled "The Effect of Jigsaw Strategy on the First Year Students of SMPN 1 Pekanbaru in Comprehending Descriptive Texts."

RESEARCH METHOD

The design of this research was pre-experimental research. There was one class as the objects of the research . Jigsaw strategy was used in the experimental class. This research was conducted by used a pre-test-treatment-post-test design. In this research

one class was chosen as the sample. This one group Pretest-posttest design involved a single group that is pretest (O_1), exposed to a treatment (X), and post-test (O_2).

According to Gay (2000) the activity in performing this research can be shown in this schema; ($O_1 \rightarrow X \rightarrow O_2$). In a one group Pretest-Posttest design, a single group participant measured on the dependent variable both before and after the manipulation of independent variable.

The design of this research can be described as follows:

Table 1. One group pre-test and post-test

Group	Pre-test	Treatment	Post-test
Experimental	O_1	X	O_2

(Sugiyono, 2012)

Pre-test was used to measure how far the students' reading comprehension. Treatment was used to help the students to improve their reading comprehension. Post-test was used to measure students' reading comprehension after giving the treatment.

RESULTS AND DISCUSSIONS

Results

This research was conducted to the first year students of SMPN 1 Pekanbaru Class VII HN which consisted of 34 students. The research conducted for six meetings which two were consisted of Pre-test and Post-test.

The Result of Pre-test

After conducting the Pre-test, the attained mean score is **70.27** for the pre-test, the median is **70** and the mode is **70**. In addition, the standard deviation is **5.70**. The frequency of the students' score can be shown in the table 2

Table. 2 Frequency of Pre-test

	Frequency Percentage			Valid Percent	Cumulative Percentage
Valid	60	2	5.9	5.9	5.9
	63.3	7	20.6	20.6	26.5
	70	13	38.2	38.2	64.7
	73.3	4	11.8	11.8	76.5
	76.7	5	14.7	14.7	91.2
	80	3	8.8	8.8	100.0

		Frequency	Percentage	Valid Percent	Cumulative Percentage
Valid	60	2	5.9	5.9	5.9
	63.3	7	20.6	20.6	26.5
	70	13	38.2	38.2	64.7
	73.3	4	11.8	11.8	76.5
	76.7	5	14.7	14.7	91.2
	80	3	8.8	8.8	100.0
	Total	34	100.0	100.0	

From Table 2, based on the criteria of students' score, it shows that the students who got score 60 and 63.3 are categorized into *mediocre* level. The students who got score 70, 73.3, 76.7 and 80 are categorized into *good* level. It means that there are no students who are in *excellent* level.

The Result of Post-test

The students' post-test result shows that the mean score of Post-test was **85.29** and the mode is **86.7**, the median is **86.7**, the standard deviation is **4.65**. Furthermore, after the mean score is calculated, the frequency of the Post-test.

Table 3. Frequency of Post-test

		Frequency	Percentage	Valid Percent	Cumulative Percentage
Valid	73.3	1	2.9	2.9	2.9
	77	2	5.9	5.9	8.8
	80	4	11.8	11.8	20.6
	83	6	17.6	17.6	38.2
	87	13	38.2	38.2	76.5
	90	6	17.6	17.6	94.1
	93	2	5.9	5.9	100.0
	Total	34	100.0	100.0	

From Table 3, based on the criteria of students' score, it shows that the student who got score 73.3, 77, 80, and 83 are categorized *good*. The students who got score 87, 90, and 93 are categorized into *excellent*

The Improvement of Students' Reading Comprehension for each Components of Comprehending Descriptive Text on Pre-test and Post-test

After conducting the pre-test and post-test, students' scores were analyzed per components to see which component that was affected significantly and which component that has the highest increased score by using Jigsaw strategy on the reading ability.

Table 4. The Improvement of Students' Reading Comprehension for each Components of Comprehending Descriptive Text on Pre-test and Post-test

Test	Component of Comprehending Reading Descriptive Text					
	FMI	FFI	FR	FMDW	FRs	FSF
Pre-test	144	119	114	103	122	117
Post-test	150	145	145	142	140	136
Improvement	6	26	31	39	18	19

According to Table 4, it shows that there are some improvements of the students' achievement after being taught by using Jigsaw strategy. It shows that the highest mean score of the six components in the pre-test is main idea (84.7) and in the post-test is also main idea (88.2). While the lowest one in the pre-test is difficult word (60.5) and in the post-test is social function (80).

Hypothesis Analysis

The last stage in analyzing the data was hypothesis. In this research, t-test formula was used to compare the result of pre-test and post-test in determining whether the hypothesis is accepted and whether the treatment has an effect on the students' reading comprehension or not.

Table 5 Paired Samples Test

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Nilai posttest - Nilai_pretest	15.02647	6.31268	1.08262	12.82387	17.22907	13.880	33	.000

$$\begin{aligned}
 t\text{-table} &= n-1 ; \alpha/2 \\
 &= 34-1 ; 0,05/2 \\
 &= 33; 0,025 \\
 &= 2.034
 \end{aligned}$$

Finally, to prove the hypothesis, the data were calculated by using t-test formula with assumption as follows:

- a. If $t\text{-test} > t\text{-table}$, the Null Hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted.
- b. If $t\text{-test} < t\text{-table}$, the Null hypothesis (H_0) is accepted and alternative hypothesis (H_a) is rejected.

Based on Table 5, it shows that the result of t-test is 13.880. Meanwhile, t-table is 2.034. The comparison between t-test and t-table showed $13.880 > 2.034$ means that t-test is higher than t-table. It can be concluded that the alternative hypothesis “there is a significant effect of using Jigsaw strategy on the ability of the first year students of SMPN 1 Pekanbaru in comprehending descriptive texts” was accepted and null hypothesis was rejected.

Discussions

Based on the procedure of the data collection technique, the teaching and learning process was divided into three steps (Pre-test,treatment, and Post-test). Pre-test was conducted in order to know the students reading comprehension before Jigsaw strategy was applied. Treatment was conducted in implementing Jigsaw strategy in teaching descriptive text. Post-test was conducted to measure students’ reading comprehension after giving the treatment.

All components of reading comprehension tested indicate that students’ ability, namely: identifying main idea. factual information, reference, difficult word, restatement, and social function. Those all of components were increased in pre-test and post-test. Therefore, applying jigsaw strategy made the students’ ability in reading comprehension increased, especially in descriptive text

It shows that the highest mean score of the six components in the pre-test was main idea (84.7) and in the post-test was also main idea (88.2). While the lowest one in the pre-test was difficult word (60.5) and in the post-test was social function (80). In order to understand the meaning, the indicators were identifying main idea and factual information that also related to social function. In order to understand the meaning words, it is based on two indicators dealing with words finding difficult word and reference.

The lowest score of the six components of reading in pre-test was difficult word because the students had lack of vocabulary. The lowest score in post-test was social function because the students were not really understand what the purpose in descriptive text. The highest score of the six components of reading in both pre-test and post-test was main idea. The students were able to understand the main topic in each paragraph.

According to description of the data of pre-test and post-test, it was found that the *mean* score of post-test was higher than the score of pre-test. ($85.29 > 70.27$). This means

that the students' post-test score was better than their pre-test scores which indicated the improvement of students' reading comprehension in descriptive text. And also there were some improvements of the students' achievement after being taught by using Jigsaw strategy. Then, the data analysis showed that t-test was higher than t-table ($10.743 > 2.064$). It can be concluded that jigsaw strategy could improve the students' reading comprehension especially in descriptive text.

According to the result of reading test, it was found that jigsaw strategy is effective to teach reading comprehension and can help teacher in the instructional process. The previous researcher of the related studies by Neneng Hoerunnisa, Nurbianta, and Kurnia Purnama also had proved that jigsaw strategy can be effective and improve students' in descriptive text.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This research was conducted by using pre-experimental design which was aimed at finding out whether or not there is a significant effect of using Jigsaw strategy in reading comprehension of descriptive text on the first year students of SMPN 1 Pekanbaru.

Based on the statistical calculation in chapter IV, it showed that the mean score of pre-test 70.27. After having conducted Jigsaw as a teaching technique and analyzed the result of post-test, it was found that the mean score of post-test is 85.29. In other words, the mean score of post-test is higher than the mean score of pre-test.

The result also showed that the value of t-test (13.880) is higher than t-table (2.034) at the significance level 5%. It means that alternative hypothesis (H_a) is accepted and null hypothesis (H_o) is rejected. Hence, there is a significant effect of using jigsaw strategy on the ability of the first year students of SMPN 1 Pekanbaru in comprehending descriptive texts.

Recommendations

Based on the previous explanations, the researcher would like to give some suggestions as for the following people:

1. The students

The students are suggested to study in group like in jigsaw strategy to become engaged in the reading texts, learn a lot of material quickly, and share information with other friends in the group. The students also suggested to read more and be more focus to increase their vocabulary in order to be more able to comprehend the text especially descriptive text.

2. The teachers

The teachers are suggested to use jigsaw strategy as an alternative technique to improve the students' reading comprehension especially in descriptive texts and

give the students quiz at the end of the session and directly discuss it with them in the class. By applying this strategy, the teachers need to give more attention on how to improve students' comprehension on the social function when implementing Jigsaw Strategy in the class. In addition, in order to make this strategy more effective in teaching and learning process, the time spent during teaching reading using Jigsaw Strategy should be controlled and considered

3. Other researchers

Considering the methodology of the research, other researchers are suggested to use control group as the samples. They also may use other experimental research design and conduct a study on the use of jigsaw strategy in reading other kinds of reading. In addition, they should organize the time as good as possible in conducting the research effectively in order to get satisfied result.

BIBLIOGRAPHY

Gay, (2000). *Educational Research: Competences for Analysis and Applications*. Ninth edition. New Jersey: Pearson Educational Inc.

Johnson, D. W., & Johnson, F. (2009). *Joining together: Group Theory and Group Skills* (10th ed.). Boston: Allyn& Bacon.

Mengduo QIAO & Xiaoling, Jin. (2010). *Jigsaw Strategy as a Cooperative Learning Technique: Focusing on the Language Learner*. Journal (Chinese Journal of Applied Linguistics (Bimonthly). Vol.33 No.4.

Sugiyono.(2008). *Metode Penelitian Kuantitatif Kualitatifdan R&D*. Bandung :ALFABETA