

THE EFFECT OF JIGSAW STRATEGY IN TEACHING READING OF RECOUNT TEXT (AN EXPERIMENTAL RESEARCH AT THE FIRST GRADE ON MAN 5 BIREUEN)

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ABSTRACT

The research of the effect of jigsaw strategy in teaching reading of recount text has been done at MAN 5 Bireuen. It was begun from March 9 2021 until March 12 2021. The problems of this research are; does the jigsaw strategy provide a better effect to students reading Score? And to what extent does the jigsaw strategy provide the significance effect to the students reading score. Based on the research problems, there are two purposes of the research, namely; to find out the jigsaw strategy to provide a better effect students reading score and to find out extent the jigsaw strategy provides the significance effect to the students reading score. The scope of this research focused on investigating the use of Jigsaw strategy in the increase of students' reading score. This research is designed as an experimental research with test consisted of pre-test and post-test as the sole instrument, the data is then analyzed using the formula introduced by Winarsunu to find the mean score and using the paired T-score statistical formula to find the t-value in order to prove the hypotheses. The results of the research on the effect of jigsaw strategy in teaching reading of recount text on 1st grade students of MAN 5 Bireuen showed that there was an increase in the mean score of students from 57,5 (pre-test) to 97,5 (post- test). The increase was also seen in the student category scores where previously they were at the sufficient category (pre-test), increased to the very high category (post-test). The hypothesis which states that there is a significant difference in students' ability in reading recount text before and after the jigsaw technique is applied (H_1) is accepted. This can be seen from the t value (8,16) > t-table value (2,07), taking into account the significant level (α) 0.05 or confidence level 95%, the correlation coefficient value 0,26, and the standard deviation value of pre-test 21,37 and post-test 3,98.

Key Words: Jigsaw Strategy, Recount Text

INTRODUCTION

Reading is one of the language skills that plays an important role for a learner to get the input from the written text. The process of reading needs a good comprehension in order to produce the understanding about the idea or information. According to Dewi, reading an academic text does not just involve finding information the text itself. More than that, it is a process of working with the text. Together with the author, the readers rebuild the meaning with the author by adjusting their previous knowledge to it [1].

According to Afflerbach, reading is a dynamic and complex process that involves skills, strategies, and prior knowledge. Reading is a social event and that reading is socially situated [2]. The meaning of reading is including the information that we read to build or construct meaning, and in order to do so we are required to use particular skills and strategies. As it has been stated by Grabe and Stoller, reading is the ability to draw meaning from the printed page and interpret this information appropriately. However, without quibbling over the exact wording of such a definition, it is, nonetheless, insufficient as a way to understand the true nature of reading abilities [3].

Reading is one of the most important skills that needs to be comprehension well. As it can be seen now, the more modern technology world has the more use of international language is need the use of English to increase are reading holds an important role as it is to explore someone knowledge, furthermore by reading students will English their vocabulary directly. It is an astoundingly complex cognitive process. According to Serravallo ,reading is thinking and understanding and getting at the meaning behind a text [4]. It means, reading is a process through which the reader to get a message from an article.

Based on curriculum at the 1st grade students of MAN 5 Bireuen in Learning Reading, the fact appearing sometimes is that not every single person is good at reading. The students face kind hard situation many times, as the researcher conducted the pre research in MAN 5 Bireuen. The students stated they had a difficult in comprehension enough to deal with reading text material.

Students will deal with a number of problems in comprehension of reading skill. The problem can comes from various factors. That affect reading comprehension they are divided into two categories. The first comprises five factors which are internal to the students, whose background are law experience, language abilities, thing abilities, affection and reading purpose. The second covers two factors external to the reader and it includes the nature of the text to be read and physical factor. The research tends to assume that the affection becomes the crucial problem of how successful the reading comprehension.

Based on Jigsaw strategy, the student can enhance cooperative learning by making each student responsible for teaching some of the materials to the group. Jigsaw strategy itself is as a cooperative learning method that has a specialty used for teaching various language skills for example writing, reading, listening, and speaking. By using this strategy students are obligated to master the text as they are given chances to comprehend the reading very well.

As a cooperative learning strategy jigsaw strategy has a strong point in communication. The communication is built among peers, It is built while the learners are obtaining the missing information that they collect and in the end they has integrated them all to become a complete information understanding about the information that they need to expertise about in delivering or present the comprehension they have get, the communication plays a big role in that part. Since so, communication is completely needed in reading comprehension during the jigsaw strategy applied. There are so many things that can be taken from this strategy. Students are encourage to learn in group task, so they are require to do the activities together with the group partners. The social personality is also built here among the students, as they interact together with their group members. When this strategy applied each of the students become expert of what text part they have get. it is a way for students to work cooperatively and help each other to learn new material and each group will get different material from the teachers.

Finally in this research the writer used Jigsaw strategy as an alternative approach to create an active teaching learning process in order to increase student's achievement in reading skill. Jigsaw strategy is an efficient way to learn the course material in a cooperative learning style which encourages listening, writing, engagement and empathy by giving each member of the group an essential part to play in the academic activity. According to the explanation above, the researcher applies Jigsaw strategy to improve students in reading. It is expected that by using Jigsaw, the students can take the information from the text well. The researcher also had a thought in assuming of the theories, the Jigsaw gave opportunity for the students to understand deeper about the text easily.

METHOD

The design of this research is an experimental research design. In this research, the researcher selected one group for the teaching and analyzing. The research was conducted at MAN 5 BIREUEN and this research was category an experimental group. The Experimental group was taught with jigsaw strategy treatments to improve students reading comprehension in Recount Text. The data was collected according to Sugiyono by giving the pre-test and pos-test [5].

Procedure of Data Collection

Test is given to students to measure the improvement made by the students in mastering text after some action [6]. In this research, the researcher used two kind of test for collecting data namely; pre-test and post-test. In doing this research, the researcher conducts an experiment. In the experiment, the researcher taught reading of recount text to one classes of the same level that was the 1st grade students of MAN 5 Bireuen. Class X MIPA₁ the experimental group (EG) the group were given a pre- test to see the students reading capacity before the treatment.

In order to test the hypothesis, two different technique were used in teaching reading of recount text. Experimental Group was taught by using jigsaw strategy in the following: first, giving the pre-test to the student; second, teaching the reading recount text and give the example of recount text while use jigsaw strategy; third, giving post-test to the students. A post-test was given a group is to see their achievement how each group worked with application of different strategy. From the posttest, the researcher got the data that could be used measure the students' progress taught by using jigsaw strategy.

Technique of Data Analysis

Data analysis is the process of systematically searching and arranging the interview transcripts, field notes, and other materials that the researcher accumulate to increase the researcher understanding [7]. To carry out the research, the researcher collected the data from the school both the teacher and students to obtain the completed finding and the relevant data other related information to support this research and to prove the hypothesis, the researcher used simple statistical formula such as mean score standard deviation (SD) and T- Score. The mean score is used to find the average score of the students as adopted by Winarsunu [8].

$$m =$$

Standard deviation (SD) used to calculated of deviation of the mean score draws as the formula as follows:

The significance of the test between two means score, the researcher used paired T- score of statistical formula. The analyze of T- score as follows:

FINDINGS AND DISCUSSION

The Data of Pre-test Score

A pre-test was given to measure students' reading skills, especially on recount text before the researcher applied the jigsaw technique. The following table shows information about the categorization of students' reading skills on the recount text based on the results of the pre-test scores.

No.	Students' Initial	Score
1	AZH	90
2	AL	30
3	AP	80
4	AN	90
5	CPA	80
6	CR	40
7	DL	80
8	FA	60
9	FN	55
10	IS	60
11	JU	40
12	MA	80
13	MI	50
14	MU	40
15	NM	80
16	NU	10
17	RO	50
18	RW	40
19	SE	50
20	UR	40
21	UN	70
22	ZU	50
Σ		1265

The Result of Pre-test

Category	Score	Frequencies	Percentage
Very High	81-100	2	9%
High	61-80	6	27%
Sufficient	41-60	7	32%
Low	21-40	6	27%
Very Low	0-20	1	5%

Category, Frequency, and the Percentage of Pre-test Score

As shown in the table above, there are two of the total students who fall into the very high category (9%); six of the total students achieved the high category (27%); seven of the total students achieved the sufficient category (32%); six of the total students achieved the low category (27%); and one of the total students is in the very low category (5%).

PRE-TEST			
No.	x	x - m	(x - m) ²
1	90	32,5	1056,25
2	30	-27,5	756,25
3	80	22,5	506,25
4	90	32,5	1056,25
5	80	22,5	506,25
6	40	-17,5	306,25
7	80	22,5	506,25
8	60	2,5	6,25
9	55	-2,5	6,25
10	60	2,5	6,25
11	40	-17,5	306,25
12	80	22,5	506,25
13	50	-7,5	56,25
14	40	-17,5	306,25
15	80	22,5	506,25
16	10	-47,5	2256,25
17		-7,5	56,25

	50		
18	40	-17,5	306,25
19	50	-7,5	56,25
20	40	-17,5	306,25
21	70	12,5	156,25
22	50	-7,5	56,25
Σ	1265	0	9587,5
<i>m</i>	57,5		

The Analysis of Pre-test Score

The pre-test score data showed a maximum score of 90 and a minimum score of 10. The mean score of the pre-test was 57.5 and the median was 52.5. Based on the pre-test score categorization table, the mean score of students on the pre-test was in the range 41-60 or was in the sufficient category. To determine the standard deviation (SD), the researcher used the *SD* formula. Thus, it is found that the standard deviation (SD) of the pre-test score is 21,37.

The Data of Post-test Score

A final test was given to measure students' reading skills, especially on recount text after the researcher applied the jigsaw technique.

No.	Students' Initial	Score
1	AZH	95
2	AL	90
3	AP	90
4	AN	95
5	CPA	100
6	CR	100
7	DL	95
8	FA	90
9	FN	100
10	IS	90
11	JU	100
12	MA	100
13	MI	100

14	MU	100
15	NM	100
16	NU	100
17	RO	100
18	RW	100
19	SE	95
20	UR	100
21	UN	95
22	ZU	100
Σ		2135

The Result of Post-test

The following table shows information about the categorization of students' reading skills on the recount text based on the results of the post-test scores.

Category	Score	Frequencies	Percentage
Very High	81-100	22	100%
High	61-80	-	
Sufficient	41-60	-	
Low	21-40	-	
Very Low	0-20	-	

Category, Frequency, and the Percentage of Post-test Score

As presented in the table above, it can be seen that all students reach the very high category (100%); none of the students got the high category (0%); there are no students who got the sufficient category (0%); none of the students got the low category (0%); and none of the students got the very low category (0%).

POST-TEST			
No.	y	y - m	(y - m) ²
1	95	-2,05	4,18
2	90	-7,05	49,64
3	90	-7,05	49,64

4	95	-2,05	4,18
5	100	2,95	8,73
6	100	2,95	8,73
7	95	-2,05	4,18
8	90	-7,05	49,64
9	100	2,95	8,73
10	90	-7,05	49,64
11	100	2,95	8,73
12	100	2,95	8,73
13	100	2,95	8,73
14	100	2,95	8,73
15	100	2,95	8,73
16	100	2,95	8,73
17	100	2,95	8,73
18	100	2,95	8,73
19	95	-2,05	4,18
20	100	2,95	8,73
21	95	-2,05	4,18
22	100	2,95	8,73
Σ	2135	0,00	332,95
<i>m</i>	97,05		

The Analysis of Post-test Score

The post-test score data shows the highest score of 100 and the lowest score of 90. The mean score of the post-test is 97.05 and the median is 100. The average post-test score is higher than the ideal average score ($97.05 > 50.00$). Based on the post-test score categorization table, the average post-test score is in the range 81-100. This means that the students' reading ability on recount text after the application of the jigsaw technique is in the very high category. To determine the standard deviation (SD), the researcher used the same formula as the pre-test. Thus, it is found that the standard deviation (SD) of the pre-test score is 3,98.

Data Analysis

The table below illustrates the statistical data of the pre-test and post-test results of students' reading ability in recount text. Statistical data provides information on the total score, mean, median, and standard deviation.

Data	Pre-test	Post-test
Total Score	1265	2135
Mean	57,5	97,5
Median	52,5	100
Standard Deviation	21,37	3,98

The Comparison Between the Result of Pre-test and Post-test

From the statistical data presented in the table above, it can be seen that the post-test mean score increased from 57,5 in the pre-test to 97,5 or an increase of 40 points. So, it can be said that after the application of the jigsaw technique, the students' ability in reading recount text increased from a sufficient category to a very high category.

As for the standard deviation (SD), the post-test standard deviation decreased from 21,37 in the pre-test to 3,98 or decreased by 17,39 points. It can be said that the variation in the data around the mean is more homogeneous.

No.	x^2	y^2	d	d^2	$(x-m)(y-m)$
1	8100	9025	5	25	-66,48
2	900	8100	60	3600	193,75
3	6400	8100	10	100	-158,52
4	8100	9025	5	25	-66,48
5	6400	10000	20	400	66,48
6	1600	10000	60	3600	-51,70
7	6400	9025	15	225	-46,02
8	3600	8100	30	900	-17,61
9	3025	10000	45	2025	-7,39
10	3600	8100	30	900	-17,61
11	1600	10000	60	3600	-51,70
12	6400	10000	20	400	66,48
13	2500	10000	50	2500	-22,16
14	1600	10000	60	3600	-51,70

15	6400	10000	20	400	66,48
16	100	10000	90	8100	-140,34
17	2500	10000	50	2500	-22,16
18	1600	10000	60	3600	-51,70
19	2500	9025	45	2025	15,34
20	1600	10000	60	3600	-51,70
21	4900	9025	25	625	-25,57
22	2500	10000	50	2500	-22,16
Σ	82325	207525	870	45250	-462,5

Detailed Data of Pre-test and Post-test

To find out the correlation coefficient from the pre-test and post-test results, the researcher used the following formula;

Thus, it is found that the correlation coefficient is 3,98.

However, to determine whether there was a significant effect on the use of the Jigsaw strategy in reading recount text, the data were analyzed statistically. In this study, researchers used a paired T test with a significant level (α) 0.05 or confidence level 95%. The T test is obtained by paying attention to the degrees of freedom (df) which is 21 (df = n - 1). The results of the paired T-test will determine the answer to the proposed statistical hypothesis where;

- H_0 is accepted if $t < t\text{-table}$, concludes that there is no significant difference from the use of the Jigsaw strategy.
- H_1 is accepted if $t > t\text{-table}$, concludes that there is a significant difference from the use of the Jigsaw strategy.

In order to find the value of "t", the researcher used the *Paired T-test* formula and the result is 8,16. So, it can be said that H_0 is rejected and H_1 is accepted because the "t" value obtained is greater than the t-table value 2,08 (see appendix). In other words, there was a significant difference in the reading ability of students, especially the ability in reading recount text before (pre-test) and after (post-test) the Jigsaw technique is applied.

CONCLUSION

Based on the results of the research, there was an increase in the mean score of students from 57,5 (pre-test) to 97,5 (post-test). The increase was also seen in the student category scores where previously they were at the sufficient category (pre-test), increased to the very high category (post-test).

The hypothesis which states that there is a significant difference in students' ability in reading recount text before and after the jigsaw technique is applied (H_1) is accepted. This can be seen from the t value (8,16) > t-table value (2,07), taking into account the significant level (α) 0.05 or confidence level 95%, the correlation coefficient value 0,26, and the standard deviation value of pre-test 21,37 and post-test 3,98.

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