THE COMPARATIVE STUDY BETWEEN JIGSAW TECHNIQUE AND STUDENTS TEAM ACHIEVEMENT DIVISION TO IMPROVE STUDENTS' READING SKILL AT EIGHT GRADE OF SMP N 4 TOLITOLI

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The objective of the research was to compare the effectiveness jigsaw and STAD at the eight grade of SMPN 4 Tolitoli. It was true experimental research. It was conducted at the eight grade of SMPN 4 Tolitoli. The researcher gave a pre-test to measure the students previous reading skill. Then, a post test was to find out the students reading skill after giving treatment which used jigsaw technique and STAD. The researcher used SPSS 21 program to analyze the data collection. The result of the data analysis showed that the average score of VIII C (Jigsaw class) was for the 51,472 pre-test and 81,904 for the post-test. The average score of VIII A (STAD class) was 53,412 for the pre-test and 80,364 for the post-test. Jigsaw technique and STAD was effective to improve students' reading skill at the eight grade of SMPN 4 Tolitoli. Although, both of the technique could improve students' reading skill but the obtained score of t-test showed that t-score -0,646 was lower than t-table 2,011. It meant that Ho was accepted and Ha was rejected. Since, the t_c was lower than t_t, there was no significance difference in the achievement students in class VIII C who were tought mind Jigsaw technique and students in class VIII A who were taught STAD.

 Key words: Comparative, Jigsaw technique, STAD, Reading skill

ABSTRAK.

Tujuan dari penelitian ini adalah untuk membandingkan efektivitas jigsaw dan STAD pada kelas delapan SMPN 4 Tolitoli. Itu adalah penelitian eksperimental yang benar. Itu dilakukan di kelas delapan SMPN 4 Tolitoli. Peneliti memberikan tes awal untuk mengukur kemampuan membaca siswa sebelumnya. Kemudian, post test untuk mengetahui kemampuan membaca siswa setelah memberikan perlakuan yang menggunakan teknik jigsaw dan STAD. Peneliti menggunakan program SPSS 21 untuk menganalisis pengumpulan data. Hasil analisis data menunjukkan bahwa skor rata-rata VIII C (kelas Jigsaw) adalah untuk pre-tes 51.472 dan 81.904 untuk post-test. Nilai rata-rata VIII A (kelas STAD) adalah 53.412 untuk pre-test dan 80.364 untuk post-test. Teknik Jigsaw dan STAD efektif untuk meningkatkan keterampilan membaca siswa di kelas delapan SMPN 4 Tolitoli. Meskipun, kedua teknik ini dapat meningkatkan keterampilan membaca siswa tetapi skor yang diperoleh dari uji-t menunjukkan bahwa t-skor -0,646 lebih rendah dari t-tabel 2,011. Itu berarti Ho diterima dan Ha ditolak. Karena, tc lebih rendah dari tt, tidak ada perbedaan yang signifikan dalam prestasi siswa di kelas VIII C yang teknik pikiran tangguh Jigsaw dan siswa di kelas VIII A yang diajarkan STAD.
Kata kunci: *Komparatif, Teknik Jigsaw, STAD, Keterampilan Membaca.*

1. Introduction

Reading is one of the important skills in English and it gives many benefits for students. By reading, people can get more knowledge and information from books, magazine, newspaper, and others. It is the most important component in learning process and social interaction because*, first*, reading is an indispensable communication tool in a civilized society. Second*, that the reading materials produced in any period of time in history most influenced by social background. Third, developments, that over the period of the recorded history of reading has led to two very different poles.

There are many defenition of reading. Reading is the someone looks into a writen text and starts to absorb the information from the writen linguistic message. In Longman Dictionary of Applied Linguistic (1992) that reading is said as:

    a. Perceiving a writen text in order to understand its content. This can be done silently (silent reading). The understanding that result is called reading comprehension.

    b. Saying a writen text aloud (oral reading). This can be done with or without understand of the content.

Other defenition by Collins English Learners Dictionary (2006) purpose that reading is an act of looking at an understanding point. This is very true because reading entails the used of vision to understand several words in a sentence and make them meaningful. Same goes to each sentence in order to understand the entire text.

Besides all the defenition from the dictionary there are also defenition made by several people. According to Marry Spartt, et. al (2005: 21), reading is one of the four language skills; reading, writing, listening, and speaking. It is a reseptive skill, like listening, this means that it involves responding to text, rather than producing it. Basically, reading involves making sense of text. To do this, it is important to understand the language of the text at word level, sentence level and whole-text level, it is also important to connect the message of the text to our knowledge of the world.

Farris, et. al. (2004:324) state that reading means getting meaning from print. Reading is not phonic, vocabulary, syllabication, or other "skills," as useful as these activities may be. The essence of reading is a transaction between the words of an author and the mind of a reader, during which meaning constructed. This mean that the main goals of reading instruction must be comprehension: above all, we want readers to understand what is on a page.

In addition, Nurhadi in Hidayatullah (2007:7) says that reading is the complex and complicated process. Because involves the internal and the external factors of the readers. The internal factors mean everything that has relationship with the reading materials and the environment where the reading taking place.

Similarly, Marksheffel in Irwan (2005) says that reading is high complex, purposeful, thinking process engaged the by entire organism while acquiring knowledge, evolving new ideas. Solving problems, relaxing or recuperating through the interpretation of printed symbols. It mean that reading is an activity

between writer and reader, the writer send his ideas in the writer symbol and then the reader catches the idea from the printed page. Reading is very complex process to learn and to teach, it involves eyes and brain. Eyes look at the messages in the printed pages and then send into the brain, the brain processes the significance of the message.

The researcher finds some problem that are faced by the students in reading. Many students have problems in understand this subject and they always confused to master the reading text. Other problem in reading is lack of vocabularies and also pronounciation. The solution of this problems is that the teacher should know more about approach, method, and strategy in learning English, as the method support the teacher way to make his teaching learning more effective.

Teachers should prepare methods that support students' skills with an approach that suits their needs (Malik, A.R 2020; Malik, 2019; Wael dkk, 2019, Darwis, 2020, T. Jacub 2020, Burhan &Saugadi, 2017)). Related to the explanation above, the researcher proposed jigsaw technique and students team achievement division as a teaching technique. Jigsaw technique is a method of organizing classroom activity that makes students dependent on each other to succeed. It was designed by social psychologist Elliot aronson (2006) to help weaken racial cliques in forcibly integrated schools. STAD is a cooperative learning strategy in which small groups of learners with different levels of ability work together to accomplish a shared learning goal. It was devised by Robert slavin (1995) and his associates at Johns hopkins university.

STAD is considered as one of the most researched, simplest and straight forward of all the cooperative learning. It was established based on the fulfillment of instructional pedagogy. It is used in meeting weel-defined instructional objectives. It is learning strategy in which there are small group of learners with different levels of abilities, where in they all come together to accomplish a shared learning goal. Based on the explanation in above the researcher would like to compare the effectiveness of jigsaw technique and students team achievement division.

2. Method of the Research

In conducting this research, the researcher used true experimental design. This research involved of pre test, treatment and post test. For the first meeting the researcher gave pre test to know their previous skills. After conducted the treatment the researcher gave post test to find out the significance of students after conducting the treatment by jigsaw and STAD technique. The researcher focused on two classes as the sample they are VIII A and VIII C. The treatment gave to experiment classes in four meeting. Total number of sample 50 students.

3. Research Methodology

In this research, the researcher used a true experimental design proposed by Sugiyono (2014 : 75). The researcher used it to find out whether the used of true-experimental can improve the students' skill in reading, skill or not. The researcher intended to examine the cause and effect between two variables, STAD and JIGSAW as dependent variables and students' reading

skill as independent variables. Experimental method is the only method of research that can truly test hypothesis concerning and effect relationship.

4. Findings and Discussion
4.1 The Result of Pre-test in jigsaw technique

Pre-test was given before treatment. This step to measure students' reading skill in recount text, there were 25 students as the sample who was given time to write down their personal experience. The pre test score of experiment class in jigsaw technique as follow:

The Result of Pre-test in class VIII C Jigsaw

NO	NAME	PRE TEST	CRITERIA
1	SM	51,9	**Failed**
2	SO	79,1	**Successful**
3	BY	50	**Failed**
4	SA	70,5	**Successful**
5	DN	61,7	**Failed**
6	RD	79,1	**Successful**
7	SL	51,6	**Failed**
8	AR	59,8	**Failed**
9	MR	30	**Failed**
10	RI	14,6	**Failed**
11	AN	17,6	**Failed**
12	RI	8,9	**Failed**
13	RL	16,8	**Failed**
14	PS	71	**Successful**
15	RY	54,7	**Failed**
16	VA	52,5	**Failed**
17	DA	56,7	**Failed**
18	RA	53	**Failed**
19	PA	57	**Failed**
20	WA	55,3	**Failed**
21	NI	67,6	**Failed**
22	AA	73,8	**Successful**
23	RA	69,1	**Failed**
24	RI	15,7	**Failed**
25	MS	68,8	**Failed**
SUM		1286,8	

4.2 The Result of Pre test in STAD

The Result of Pre-test in class VIII A STAD

NO	NAME	PRE TEST	CRITERIA
1	SN	71,3	**Successful**
2	MY	55,6	**Failed**
3	RZ	71	**Successful**
4	FN	70,2	**Successful**
5	IW	43,8	**Failed**
6	SR	62,6	**Failed**
7	HN	60,3	**Failed**
8	IW	56	**Failed**
9	MM	50,8	**Failed**
10	NN	39,8	**Failed**
11	RT	65,4	**Failed**
12	JI	25	**Failed**
13	MZ	31,7	**Failed**
14	IM	8,4	**Successful**
15	RW	60,3	**Failed**
16	AF	60,6	**Failed**
17	NH	30,8	**Failed**
18	DA	62,6	**Failed**
19	DD	76,1	**Successful**
20	MA	65,1	**Failed**
21	CD	70,5	**Successful**
22	NA	55,6	**Failed**
23	IA	77,5	**Successful**
24	NA	27,8	**Failed**
25	IN	36,5	**Failed**
SUM		1335,3	

4.3 The Result of Post test in Jigsaw Technique

The Result of Post Test in class VIII C Jigsaw

NO	NAME	POST TEST	CRITERIA
1	SM	76,7	**Successful**
2	SO	92,6	**Successful**
3	BY	70,2	**Successful**
4	SA	94,1	**Successful**
5	DN	83,4	**Successful**
6	RD	94,1	**Successful**
7	SL	74,2	**Successful**
8	AR	77,8	**Successful**
9	MR	78,4	**Successful**
10	RI	72,2	**Successful**
11	AN	71,7	**Successful**
12	RI	70	**Successful**
13	RL	73,7	**Successful**
14	PS	89,4	**Successful**
15	RY	90,1	**Successful**
16	VA	83,4	**Successful**
17	DA	75,8	**Successful**
18	RA	91,8	**Successful**
19	PA	91,8	**Successful**
20	WA	81,7	**Successful**
21	NI	91,2	**Successful**
22	AA	79,2	**Successful**
23	RA	81,4	**Successful**
24	RI	73,1	**Successful**
25	MS	89,6	**Successful**
SUM		2047,6	

4.4 The Result of Post test in STAD

The Result of Post Test in class VIII A STAD

NO	NAME	POST TEST	CRITERIA
1	SN	88,4	**Successful**
2	MY	70,1	**Successful**
3	RZ	90,4	**Successful**
4	FN	87,8	**Successful**
5	IW	72,4	**Successful**
6	SR	72,5	**Successful**
7	HN	73,3	**Successful**
8	IW	73,4	**Successful**
9	MM	71,8	**Successful**
10	NN	72,1	**Successful**
11	RT	75,6	**Successful**
12	JI	70,7	**Successful**
13	MZ	84,5	**Successful**
14	IM	69,4	**Failed**
15	RW	82,1	**Successful**
16	AF	84,5	**Successful**
17	NH	72,1	**Successful**
18	DA	72,4	**Successful**
19	DD	94,1	**Successful**
20	MA	94,1	**Successful**
21	CD	88,7	**Successful**
22	NA	84,5	**Successful**
23	IA	86,8	**Successful**
24	NA	90,7	**Successful**
25	IN	86,7	**Successful**
SUM		2009,1	

4.5 Discussion
4.5.1 The Result of Observation

The researcher discussed the procedure of applied in classroom and the result of the data analysis. The discussion was intended to know whether using Jigsaw technique and STAD can improve students reading skill at the eight grade of SMPN 4 Tolitoli.

The first step of this research was pre-test. Pre-test was conducted at the first meeting to both of experiment class. Pre-test is aimed to measured the students' reading skill at the first time. In conducting pre-test on the experimental class VIII C there were 25 students as a sample who were must be reading. After getting students' result of the pre-test, the reseacher analyzed students' score statistically used formula where the obtained score times 100 and divided by total sample in experiment class, then it was found the pre-test score of experimental class were 25 students, 5 (20%) from 25 students got the fair score and 20 (80%) from 25 students got the poor score. The researcher concluded that the first VIII C of SMPN 4 Tolitoli still poor in reading.

 In the same step also conducted at VIII A class. After pre-test was given, 6 (24%) from 25 students got the fair score and 19 (76%) from 25 students got the poor score.

The second steps of this research was test of homogeneity. Homogeneity test was done to know whether sample in the research came from population that had some variance or not. In this research, the homogeneity of the test was measured by comparing the result of pre-test or obtained score (f_{score}) with (f_{table}). Thus, if the obtained score (f_{score}) was lower than the f_{table} or equal, it could be said that the H_o was accepted. It meant that the variance was homogeneous. After homogeneity test was done, the researcher continued to the step was treatment. Treatment was given to both of the experimental class with Jigsaw technique and STAD. In the treatment steps, the researcher used four meetings.

Treatment was given four times during the research and 80 minutes for each meeting. The procedure that was be done during the treatment as follows:

In Jigsaw the treatments as followed:

a.   The first meeting was conducted on October 10th 2019. The researcher explained about recount text, including the kinds of recount, generic structures, and purpose of the recount text. Then the researcher gives an example of recount text to find the generic structures that exists in a story in the form of recount text. The researcher also explain about defenition of Jigsaw, purpose and adventages of jigsaw. Then, the researcher devided the students into group. One group consist of 4-5 students. Next, the researcher divided lesson 4-5 segment. For example, the students learn about history Elanor Roosevelt, the researcher might divided a short biography of her into stand alone segments on : 1). Elanor Roosevelt's early years, 2). Her marriage and family life, 3). Her as first lady, 4). Beyond the white house and 5). Death. After that, the researcher assigned each students to learn one segment. Students are given time to read their segment at least twice and become familiar with it. Then, the researcher formed a temporary " Expert Groups" by having one student from each

jigsaw group join other students assigned to the same segment. Researcher give time in this group of experts to discuss the main points of their segments and to train the percentage they would make for their jigsaw groups. The final step, researcher return students to their jigsaw group and ask each student to present the segment to the group. At the end of the session, researcher give a quiz an the material.

b. The second meeting, the researcher was conducted on October [11th] 2019. The researcher divided the students' into 4 group. Because, 5 students' were absent. One group consist 5 students'. Next, the students' learn about story "Visiting My Village" and the next step same with procedure in the first meeting.

c. The third meeting, the researcher was conducted on October 17th 2019. The researcher divided students' into 4 group againt. Because, 3 students' were absent. One group consist of 5 until 6 students'. Then, the students' learn about strory "Go Camping" and the next step same with procedure in the first meeting.

d. The last meeting, the researcher was conducted on October 18th 2019. The researcher divided students' into 5 group. One group consist of 5 students'. Then, the students' learn about history "Lalu Muhammad Zohri" and the next step same with procedure in the first meeting.

In STAD treatment as followed:

a. In the first meeting was conducted on October 10th 2019. The researcher explain about definition of STAD method, purposes and advantages of the method. After that, the researcher divided the students into group. One group consists of 4 – 5 students in heterogeneous members. Then the researcher present the lessons. Next, the researcher gave a task to the group and it will be answered by members of the group. Members who already understand can explain to other members until all members understand. After that, the researcher gave a quiz or question to all students. When answering the quiz, The students cannot cheat each other. Next, the researcher gave evaluation. Then the researcher and students gave conclusion.

b. The second meeting, the researcher was conducted on October 12th 2019. The researcher divided the students' into 4 group. Because, 7 students' were absent. One group consist 4 until 5 students'. Next, the students' learn about story "Go Camping" and the next step same with procedure in the first meeting.

c. The third meeting, the researcher was conducted on October 17th 2019. The researcher divided the students' into 5 group. One group consist 5 students'. Next, the students' learn about history "Lalu Muhammad Zohri" and the next step same with procedure in the first meeting.

d. The last meeting, the researcher was conducted on October 19th 2019. The researcher divided the students' into 5 group. One group consist 5 students'. Next, the students' learn about "History Eleanor Roosevelt" and the next step same with procedure in the first meeting.

After gave the treatment to both of experimental class with Jigsaw technique and STAD. The post-test was given to VIII C aimed to measuring the students' improvement on the score of experimental class or not. After getting students result of post-test the researcher analyzed students' score statistically used formula where the obtained score times 100 and divided by total sample in experiment class. Then it was found the post-test of 7 (28%) from 25 students got the excellent score, 2 (8%) from 25 students got the very good score, and 4 (16%) from 25 students got the good score. From 25 students got the fair score, 12 (48%). The researcher concluded that the students of VIII C (Jigsaw class) was improved students' reading skill.

The same step also conducted in class VIII A , after post-test was given the researcher computed the students' individual score and average the students from the highest to the lowest in order to know the position of the students. From 25 students in VIII A class were 4 (16%) from 25 students got the excellent score, 5 (20%) from 25 students got the very good score, and 4 (16%) from 25 students got the good score. From 25 students got the fair and 11 (44%). The researcher concluded that the students of VIII A (STAD class) was improved students' reading skill.

4.5.2 Result of Homogeneity Test

Test of homogeneity was done to know whether sample in the research come from population that had same variance or no. In this study, the homogeneity of the test was measured by comparing the obtained score (F_{score}) with (F_{table}). Thus, if the obtained score (F_{score}) was lower than the (F_{table}) or equal, it could be said the Ho was accepted. It meant that the variance was homogeneous.

4.5.3 Result of Normality

The researcher was applying normality test. Normality test used to find out the data of experiment classes which had been collected come from normal distribution or not. To analyze the test the researcher use one-sample kolmogorov-smirnov-test. The result of the test there was sign>α or 0.457 is higher than 0.05. So it can be concluded that the data of both experimental class was distributed normally.

4.5.4 Result of T-test

The researcher used t-test to test the hypothesis where $h_a = t_c > t_t$ $h_0 = t_c < t_t$ to see the difference between the experimental and control group, the researcher used SPSS 21.0 program (independent sample test) to analyze the data collection. It was found that that $t_c = 0.646$ Futhermore, t_{count} score was compared with t_{table} score with df = 48 on the standard of significant 0,05, so it was found that $t_t = 2,011$. Because of $t_c = - 0,646 < t_t = 2.011$ so it means that the null hypothesis H_o was **accepted** and the null alternative hypothesis H_a was **rejected.**

5. Conclusion

Based on the findings and discussion in previous chapter, it could be concluded that through Jigsaw technique and STAD could improved students' reading skill. The result of the data analysis showed that the average score of VIII C (the students who were taught through Jigsaw) was for the 51,472 pre-test and 81,904 for the post-test. The average score of VIII A (the students who were taught through STAD) was 53,412 for the pre-test and 80,364 for the post-test.

Jigsaw technique and STAD was effective to improve students' reading skill at the eight grade of SMPN 4 Tolitoli in academic year of 2018/2019. Although, both of the technique could improve students' reading skill but the obtained score of t-test showed that t-score -0,646 was lower than t-table 2,011. It meant that Ho was accepted and Ha was rejected. Since, the *tcount* was lower than *ttable*, there was no significance difference in the achievement students in class VIII C who were tought mind Jigsaw technique and students in class VIII A who were taught STAD

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