

The Effect of Jigsaw Learning Strategy to Students' Civic Learning Outcomes in Grade V SDN 107403 Cinta Rakyat Academic Year 2016/2017

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Abstract : The purpose of this research is to know: (1) Influence of jigsaw learning strategy toward learning result of Civics student of class V SD Negeri 107403 Cinta Rakyat, (2) Differences of learning result of Civics students who taught using conventional jigsaw learning strategy in class V SD Negeri 107403 Cinta Rakyat . The population of this research is the students of grade V of SD Negeri 107403 Cinta Rakyat. TP. 2016/2017 consists of 2 classes with a total of 62 students. The sample of this research is determined by the sample class that is V-1 class = 31 students to follow the learning by using jigsaw learning strategy and V-2 class = 31 students to follow the learning by using conventional strategy. The sampling technique is done by total sampling. Research instruments to measure learning outcomes were used multiple choice form tests. The data analysis technique used the comparison of the average of two sample groups. The result of the research are (1) jigsaw learning strategy have an effect on to student's learning result of Civics. Implementation of pretest and postes in jigsaw class there is an increase of average result of student learning of Civics that is 52,10 has increased to 87,03, (2) There is difference of result of learning of Civics student using jigsaw strategy with conventional strategy. Student learning outcomes have $t_{count} (3,799) > t_{table} (1,671)$ and sig.2-tailed (0,000) $< \alpha = 0,05$ so as to prove the difference of students' average learning outcomes

Keywords – jigsaw learning strategies and learning outcomes

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I. Introduction

In general the purpose of national education is to increase the devotion to the omnipotent God, intelligence, skills, enhance manners, strengthen personality, strengthen the spirit of pride in order to become human development that can build itself and together responsible for nation building. Implementation of this education is certainly a deliberate attempt to help in menumbuhkembangkan individual to maturity. The purpose of education also plays a role to educate the life of the nation and social welfare. Rapid development in the field of technology and information today is not separated in relation to education. Education is an indispensable thing for the individual, when and wherever he is. The purpose of education in schools, basically is to lead the students to change the behavior of good, intellectual, moral, social [1].

To achieve the purpose of education, then the learning process. Through this learning process found the learning process undertaken by students is the key to the success of student learning. Learning is a conscious effort made by teachers and students to achieve the behavioral change that teachers expect [2]. Learning is an effort or activity that is done regularly and planned by using certain methods according to the science or skills learned in order to obtain better learning outcomes. Learning outcomes as a product of the teaching and learning process are not the result of a single process, but are part of the interaction of a number of learning success factors that can be sourced from within or outside the student's self [3]. The success of student learning can certainly be seen in the ability of students in understanding and mastering material on certain subjects as in the subject of Citizenship Education (Civics). The subject of Civics is one of the most important and important lessons to be learned and mastered by the students. Therefore, Civics can not be separated from everyday life. The Civic Lesson is also one lesson that has characteristics different from the others. Students should have a good understanding, mastery about Civics. In addition, PKN is also used to form student personality so that students have good behavior.

In Civics learning, especially in Primary School (SD), it is often found that students still have low learning motivation, students assume that Civic learning is boring, uninteresting. Students have a low attitude and poor understanding of Civics learning. Moreover, students assume that the Civics only presents the material that is only limited to the story of life around him and no new that is considered more attractive to students to learn. Based on the results of interviews conducted to Roslinda's mother as the elementary school teacher

107403 on January 9, 2017, it is known that students are less interested in learning the Civics presented teachers in the classroom. At the time the teacher delivered the lesson material the students pay less attention to the explanations that are delivered and often play around in the classroom. Students consider the lesson of Civics is a less important lesson so that students are less serious in following the subject matter, consequently the students are lazy to learn and the students also do not try to learn seriously which resulted in low student learning outcomes.

In the learning activity of Citizenship Education (Civics) there is a limit of achievement of the minimum learning achievement that must be achieved by the students is called Minimum Exhaustiveness Criteria (KKM). Based on the National Education Standards of Citizenship Education (Civics) at least 70. Value obtained by elementary school students 107403 Cinta Rakyat still not reached to KKM, not yet competent and has not reached the target of learning outcomes set for productive lesson that is 70. This condition is of concern, need to create an atmosphere of learning that is able to overcome the low student learning outcomes. Teachers need to help enable students in the learning process by guiding and directing students to be able to improve learning outcomes. Learning problems experienced by students can occur due to a learning strategy oriented to traditional approaches that less place and pay attention to learners in the learning process. Thus the factors that cause the occurrence of the problem of low student learning outcomes can be caused because sara teachers convey lesson material that is not appropriate, either because the strategy is not in accordance with the material or because of the way delivery is less fun.

The ongoing learning process also tends to use teacher centered. In this approach the teacher does more teaching and learning activities with lecturing form. At the time of studying or listening to lectures, students are limited to understanding while making notes, for those who feel they need it. Teachers are central to the role of achieving learning outcomes and as if they are the only source of knowledge. Teachers only provide one-way information because what they want to achieve is how teachers can teach well so that there is only the transfer of knowledge [4]. This problem can be interpreted as a condition that in the process of studying or understanding the CCP there are certain obstacles. Nevertheless the problem can certainly be overcome well. In the case of acceptance of subject matter submitted by the teacher, not all students can directly understand it. Thus, the lack of teachers' ability to apply learning strategies in the classroom also leads to a lack of student interest in learning. Because if it only comes from the source book that is in the teacher, maybe the students feel bored and the learning process will also be monotonous, that is the teacher just lecture in front of the class then give the task. In the implementation of learning of course teachers should pay attention and choose the right way or teaching strategy so that the implementation of learning can be done well. Learning strategies used by teachers are plans to achieve learning objectives and help students achieve their learning objectives. By choosing the right learning strategy can influence and determine the student's own learning outcomes [5].

Sanjaya argued that a learning process successfully achieved the goal which is the result of interaction and interrelation of the components that make up the learning system [6]. These components are objectives, subject matter, learning strategies, media and evaluation. Each component will affect the success of the learning process and will affect the successful achievement of learning objectives. Furthermore, Miarso also argued that learning strategy is a comprehensive approach to learning in a learning system, in the form of general guidelines and framework of activities to achieve the general goal of learning, which is outlined from a philosophical view or a particular learning theory [7]. To achieve success in the learning process done various ways one of them is by choosing the right learning strategy that can support to improve student learning outcomes. One such strategy is the jigsaw learning strategy. This jigsaw learning strategy is used so that students can encourage their activities to think and discuss their thoughts with friends and also stimulate students' courage to express their opinions in front of the class [8].

During the implementation of learning, especially the implementation of learning Civics need to be designed learning strategies by enabling students so as to improve student learning outcomes by choosing and implementing appropriate learning strategies. One of the learning strategies is the jigsaw learning strategy. The use of jigsaw learning strategy directs students to accustomed to study in groups, to discuss tasks, because by being accustomed to the students will be interested and enjoy it so that it will make students become fond of lessons [9]. Solihatin points out that the jigsaw learning strategy is one of the cooperative learning strategies in which students learn and work in small, collaborative groups whose members consist of 4 to 6 people with heterogeneous group structures. Strength learning jigsaw is a cooperative learning where in the learning process done by working in a group collaboratively [10]. Through the implementation of learning this group will stimulate students to cooperate in groups, collaborative and stimulate students more passionate in learning so as to improve learning outcomes.

The results of previous research on jigsaw's cooperative learning in improving students' outcomes are Hertiavi's research on the application of jigsaw learning in learning suggests that cooperative learning of Jigsaw type is appropriate when applied to materials that do not contain much formula or equation but more contains theory- theory [11]. Such material allows students to read their own before classroom learning begins. So

students are expected to have basic knowledge before learning. This is in accordance with the principle of Jigsaw type learning that emphasizes the experience of students and in the implementation of students must share experiences or opinions to other students. The result of Syarifuddin's research on the implementation of learning by using cooperative learning model type jigsaw suggests that in cooperative learning learning can be defined as a work system or a structured group learning and cooperative learning is a teaching and learning strategy that emphasizes attitude or behavior together in working regularly in group, consisting of two or more people [12]. Learning cooperative learning jigsaw type is a model of learning by using a grouping or a small team that consists of four, six, even up to eight people who have different background.

The results of Demircioğlu's research on the influence of cooperative jigsaw learning on the understanding of basic concepts in supporting student learning outcomes suggest that teachers should be aware of the importance of alternative knowledge and conceptions to support student outcomes or achievements [13]. In this process, it is necessary to understand the various factors important for the teacher that is about the mastery of the model or learning strategy. Teachers can apply cooperative learning models and applications such as jigsaw techniques in the implementation of the learning process in the classroom. Furthermore, Yin Chu's research on the application of cooperative learning jigsaw in student learning suggests that in the implementation of jigsaw learning in the classroom, students develop active learning by helping each other learn. The jigsaw technique has proven effective in the development of students' critical thinking processes and in the learning process so as to support the success of student learning [14]. Based on the results of the research mentioned above can be understood about the importance of learning strategies in the implementation of learning by teachers in the class, especially the important role of jigsaw cooperative learning strategy in the success of student learning. Researchers are very interested to apply jigsaw learning strategies tailored to the needs of elementary school students 107403 Cinta Rakyat. Implementation of this research is also about implementation of jigsaw learning strategy. This research is specifically a teaching effort to transform a monotonous and boring learning atmosphere into a more conducive learning atmosphere by blending students' physical, psychological and emotional potentials into an integral strength unit. With this learning will foster a high learning spirit in students so that will further improve student learning success.

II. Method

This research is a quasi experimental research with two group pretest-posttest design. The research population is all students of grade V of SD Negeri 107403 Cinta Rakyat which amounts to 62 people consist of 2 classes. With the details of the class of V-A class of 31 students and class V-B amounted to 31 students. Given this research, the total population of 62 students is taken as a whole, the sampling is determined by total sampling technique, then determined from 2 sample classes determined as the experimental class, the VA class amounted to 31 people to the class of treatment of jigsaw learning strategy (as class experiment) and VB class totaling 31 students into a class of conventional strategy (control class). written test in this study is a test in the form of objective test questions (multiple choice) which amounted to 30 questions and has 4 choices of answers namely a, b, c, and d. each correct answer is given a score of 1 and the wrong answer given a score of 0 is given to the two experimental classes. Preparation of tests measured based on the assessment of cognitive aspects and tailored to the competencies to be achieved in learning that is C1, C2, C3, C4.

III. Result And Discussion

Result

This research was conducted in SD Negeri 107403 Cinta Rakyat which is located at Desa Cinta Rakyat Percut Sei Tuan Deli Serdang Regency. Selection of place of research implementation is caused by the factor that is the low learning outcomes of Civics students grade V SD Negeri 107403 Cinta Rakyat Percut Sei Tuan Deli Serdang District. The study was conducted with four meetings in each experimental class, namely the class using jigsaw and classroom learning strategy using conventional learning strategy. Before doing the learning in each class, the researcher first do pre test to know the ability or mastery of students to the subject matter that will be delivered. After obtained the result of pretest then do learning with each learning strategy. At the end of the meeting in each class of experiments conducted postes to determine the success of the implementation of learning, especially the success of students in mastering the subject matter Civics delivered. Before the implementation of learning begins or implemented, given the matter of pretest Civics in students in class using jigsaw learning strategy that amounted to 31 students. Pretest in the form of answers to the description or explanation given to the students.

Table 1 Distribution of Pretrial Frequency Learning Outcomes of Civics Students Class Learning Strategy Jigsaw

No	Interval	Frequency	Percentage	Cumulative Percent
1.	35-40	3	9,68	9,68
2.	41-46	5	16,13	25,81
3.	47-52	9	29,03	54,84
4.	53-58	6	19,35	74,19
5.	59-64	5	16,13	90,32
6.	65-70	3	9,68	100,00
Total		31	100,00	
Mean		52,10		

Pretest data obtained is tabulated, processed and analyzed descriptively. Pretest result of student learning of Civics in class using jigsaw learning strategy can be concluded that the data of score distribution of pretest result of student learning by using jigsaw learning strategy has normal data distribution and in accordance with the criteria of the assessment of students' learning outcomes that have been determined. Before the implementation of learning at the start, given the matter of pretest Civics in students in class by using conventional learning strategies that amounted to 31 students. Pretest in the form of answers to the description or explanation given to the students.

Table 2 Distribution of Pretrial Frequency Learning Outcomes of Civics Students Class Strategies Conventional Learning

No	Interval	Frequency	Percentage	Cumulative Percent
1.	30-36	3	9,68	9,68
2.	37-43	5	16,13	25,81
3.	44-50	6	19,35	45,16
4.	51-57	8	25,81	70,97
5.	58-64	6	19,35	90,32
6.	65-71	3	9,68	100,00
Total		31	100,00	
Mean		50,97		

Pretest data obtained is tabulated, processed and analyzed descriptively. Pretest of students 'Civics learning result in class by using conventional learning strategy can be concluded that the data of pretest score distribution of student learning result by using conventional learning strategy has normal data distribution and in accordance with the criteria of assessment of students' learning outcomes that have been determined. After the learning is done, the postes of PKn are given to the students in the class by using jigsaw learning strategy which is 31 students. Problem postes in the form of multiple choice of 30 questions.

Table 3 Frequency Distribution Postes Learning Results Civics Students Class Jigsaw Learning Strategies

No	Interval	Frequency	Percentage	Cumulative Percent
1.	70-74	2	6,45	6,45
2.	75-79	3	9,68	16,13
3.	80-84	6	19,35	35,48
4.	85-89	9	29,03	64,52
5.	90-94	6	19,35	83,87
6.	95-99	3	9,68	93,55
7.	100-104	2	6,45	100,00
Total		31	100,00	
Mean		87,03		

The data obtained postes are tabulated, processed and analyzed descriptively. Postes result of learning of Civics student in class by using jigsaw learning strategy can be put forward the conclusion that data distribution of postes score of learning result of student by using jigsaw learning strategy have normal data distribution and in accordance with criterion of assessment on result of learning of Civics of student which have been determined. After the learning has been completed, the postes of PKn are given to students in the class of conventional learning strategy of 31 students. Problem postes in the form of multiple choice of 30 questions.

Table 4 Frequency Distribution Postes Learning Results Civic Students Using Conventional Learning Strategies

No	Interval	Frequency	Percentage	Cumulative Percent
1.	63-67	2	6,45	6,45
2.	68-72	3	9,68	16,13
3.	73-77	5	16,13	32,26

4.	78-82	11	35,48	67,74
5.	83-87	5	16,13	83,87
6.	88-92	3	9,68	93,55
7.	93-97	2	6,45	100,00
Total		31	100,00	
Mean		79,74		

The data obtained postes are tabulated, processed and analyzed descriptively. Postes the results of learning Civics students in the classroom by using conventional learning strategies can be put forward the conclusion that the data distribution of postes score of student learning outcomes using conventional learning strategies have a normal distribution of data and in accordance with the criteria of assessment on student learning outcomes that have been determined. The results of the validity test on 30 items of questions for the test of students' learning achievement can be put forward as follows:

Table 5 Test Results Validity of Test Results of Civics Learning

No	R _{acc}	r _{Table}	Exp
1	0.430	0.361	Valid
2	0.405	0.361	Valid
3	0.689	0.361	Valid
4	0.689	0.361	Valid
5	0.449	0.361	Valid
6	0.407	0.361	Valid
7	0.689	0.361	Valid
8	0.712	0.361	Valid
9	0.559	0.361	Valid
10	0.370	0.361	Valid
11	0.729	0.361	Valid
12	0.737	0.361	Valid
13	0.380	0.361	Valid
14	0.729	0.361	Valid
15	0.729	0.361	Valid
16	0.740	0.361	Valid
17	0.729	0.361	Valid
18	0.740	0.361	Valid
19	0.608	0.361	Valid
20	0.527	0.361	Valid
21	0.499	0.361	Valid
22	0.740	0.361	Valid
23	0.689	0.361	Valid
24	0.608	0.361	Valid
25	0.689	0.361	Valid
26	0.740	0.361	Valid
27	0.734	0.361	Valid
28	0.480	0.361	Valid
29	0.449	0.361	Valid
30	0.734	0.361	Valid

Based on the calculation in Table 5 above, it can be concluded that the whole test instrument is valid and can be used as a test instrument for student learning outcomes. Based on calculations obtained the calculated $r_{11} = 0.922$. Furthermore, the value of r_{11} obtained from the calculation is then converted to the limits put forward Arikunto (2008: 100) namely: (1) low reliability (0.00 - 0.40); (2) moderate reliability (0.41 - 0.70); (3) high reliability (0.71 - 0.90); (4) the reliability is very high (0.91 - 1.00). So it can be concluded that the student learning outcomes used have high reliability.

Table 6 Results of Different Power and Level of Tests

No	Dp				Difficulty Level			
	B	JS	P	Criteria	BA	BB	D	Criteria
1	17	30	0.567	Medium	8	3	0.333	Sufficient
2	15	30	0.500	Medium	7	2	0.333	Sufficient
3	18	30	0.600	Medium	8	1	0.467	Good
4	18	30	0.600	Medium	6	1	0.333	Sufficient
5	16	30	0.533	Medium	8	3	0.333	Sufficient
6	10	30	0.333	Low	8	3	0.333	Sufficient
7	18	30	0.600	Medium	8	1	0.467	Good
8	15	30	0.500	Medium	8	1	0.467	Good
9	7	30	0.433	Medium	5	2	0.400	Sufficient
10	18	30	0.600	Medium	7	2	0.333	Sufficient

No	Dp				Difficulty Level			
	B	JS	P	Criteria	BA	BB	D	Criteria
11	17	30	0.567	Medium	8	0	0.533	Good
12	13	30	0.433	Medium	7	0	0.467	Good
13	17	30	0.567	Medium	8	3	0.333	Sufficient
14	17	30	0.567	Medium	8	0	0.533	Good
15	17	30	0.567	Medium	8	0	0.533	Good
16	17	30	0.567	Medium	8	0	0.533	Good
17	17	30	0.567	Medium	8	0	0.533	Good
18	17	30	0.567	Medium	8	0	0.533	Good
19	15	30	0.500	Medium	8	2	0.400	Sufficient
20	15	30	0.500	Medium	7	2	0.333	Sufficient
21	9	30	0.400	Medium	6	3	0.400	Sufficient
22	17	30	0.567	Medium	8	0	0.533	Good
23	18	30	0.600	Medium	8	1	0.467	Good
24	15	30	0.500	Medium	8	2	0.400	Sufficient
25	18	30	0.600	Medium	8	1	0.467	Good
26	17	30	0.567	Medium	8	0	0.533	Good
27	17	30	0.567	Medium	8	0	0.533	Good
28	9	30	0.430	Medium	7	5	0.433	Sufficient
29	16	30	0.533	Medium	8	3	0.333	Sufficient
30	17	30	0.567	Medium	8	0	0.533	Good

Based on the calculation in Table 6 above it can be argued that the results of testing the different power and level of kesukran about the test results of learning are prepared. For different power problem there are 2 categories are medium and low. For the level of difficulty of the problem there are 2 categories is enough and good. Thus, it can be concluded that the test instrument of students' learning outcomes based on the test results of different power and problem level has met the requirements so that it can be used as a test instrument of student learning outcomes for Civics subjects.

1. Testing of data normality is done by using kolgomorov-smirnov statistic test. The overall normality test of data can be presented in Table 4.7 below:

Table 7 Test Results Data Normality Using Kolmogorov-Smirnov Statistical Test

No	Group	p	Asymp. Sig (P)	Exp.
1	Pretes learning result of Civics student of jigsaw learning strategy class	0,05	0,499	Normal
2	Pretes learning outcomes of Civics students class of conventional learning strategies	0,05	0,168	Normal
3	Postes the result of learning Civics students using jigsaw learning strategy	0,05	0,516	Normal
4	Postes results of student learning Civics using conventional learning strategies	0,05	0,207	Normal

In Table 7 above shows the results of the normality test data calculation of student learning outcomes based on learning strategies, the overall test results obtained that the price $p > \alpha = 0.05$ so that the overall data is normally distributed. Homogeneity test is meant to know the difference of data variance of each class. To determine the homogeneity of learning outcomes done by Barlet test as follows:

- 1) Homogeneity test of Variance between group of sample based on pretest of student learning result of Civics

Table 8 Summary of Homogenistas Variance Test Results between Sample Groups Based on Pretes

No	Sample	Varians (S2)	F _{count}	F _{table}	Conclusion
1.	Jigsaw	67,96	1,579	1,760	Homogen
2.	Konvensional	107,37			

From Table 8 above, it is known that pretest of Civics learning outcomes from students group of jigsaw learning strategy and conventional strategy is obtained F_{count} = 1,1,579 and F_{table} = 1,760 at significance level 0,05 with dk = 1. The above calculation result stated that F_{hitung} < F_{tabel} which has the meaning that the pretest of student learning outcomes for groups taught by jigsaw and conventional strategies has homogeneous variance which means that the samples from each treatment group in this study have the same character empirically to the problems studied

- 1) Homogeneity test The variance between sample groups based on students' Civics learning postes

Table 9 Summary of Homogenistas Testing Results Variance between Sample Groups Based on Postes

No	Sample	Varians (S2)	F _{count}	F _{table}	Conclusion
1.	Jigsaw	58,03	1,034	1,760	Homogen
2.	Konvensional	56,13			

From Table 9 above, it is known that postes of learning result of group of students using jigsaw and conventional learning strategy are obtained F_{count} = 1.034 and F_{table} = 1,760 at the 0.05 significance level with dk = 1. The comparison result F_{count} < F_{table} states that the jigsaw and conventional learning strategy group has a homogeneous variance which means that the samples from each treatment group have the same character empirically to the problem under study. Before conducting the learning done pretes and after the learning done postes. Pretest implementation is to know the student's initial ability. The number of students who followed the pretest and postes in the jigsaw class that amounted to 31 people. Pretest and postes results in the jigsaw class can be put forward as follows:

Table 10 Pretest and Posttest Value Data of Jigsaw Class

No	Class Preview Value Jigsaw	Frequency	Class Post Value Jigsaw	Frequency
1.	35-40	3	70-74	2
2.	41-46	5	75-79	3
3.	47-52	9	80-84	6
4.	53-58	6	85-89	9
5.	59-64	5	90-94	6
6.	65-70	3	95-99	3
7.			100-104	2
	Total	31	Total	31
	Mean	52,10	Mean	87,03

From the results of calculations in Table 10 on the results of pretest and postes in the class using the jigsaw learning strategy can be stated that the pretest results are smaller than the postes results (52.10 < 87.03) which proves that there is an increase in the average of learning outcomes of Civics. Thus it can be concluded that there is influence of jigsaw learning strategy to student learning result of Civics. Before conducting the learning done pretes and after the learning done postes. The number of students who followed the pretest and postes in the conventional class is 31 people. Pretest and postes results in the conventional class can be put forward as follows:

Table 11 Pretest and Convent Class Post Value Data

No	Class Preview Value Conventional	Frequency	Class Post Value Conventional	Frequency
1.	30-36	3	63-67	2
2.	37-43	5	68-72	3
3.	44-50	6	73-77	5
4.	51-57	8	78-82	11
5.	58-64	6	83-87	5
6.	65-71	3	88-92	3
7.			93-97	2
	Total	31	Total	31
	Mean	50,97	Mean	79,74

From the results of the calculations in Table 11 above about the results of pretest and postes in the classroom using conventional learning strategy can be stated that the pretest results are smaller than the result of postes (50,97 < 79,74) proving that there is an increase of average of learning result of Civics. Thus can be put forward the conclusion that there is influence of conventional learning strategies to student learning outcomes Civics. The test criteria used are if t_{count} < t_{table} and sig. (2-tailed) > α = 0,05 then H₀ is accepted. The calculation uses independent test sample test (t-test) with the help of SPSS software. The calculation results can be presented as follows:

Table 12 Pretest Difference Test Results Student Civics Learning Outcomes

Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	

								Lower	Upper
Equal variances assumed	2.538	.116	.475	60	.637	1.129	2.378	-3.628	5.886
Equal variances not assumed			.475	57.114	.637	1.129	2.378	-3.633	5.891

Based on Table 12 above shows that both pretest data of student learning result of Civics have tcount (0,475) <ttable (1,671) and sig.2-tailed (0,637)> $\alpha = 0,05$ so H0 is accepted. Based on the results of these calculations can be raised the conclusion that the two classes have the average pretest of the same Civic learning outcomes. The test criteria used are if tcount <ttable and sig. (2-tailed)> $\alpha = 0,05$ then H0 is accepted. The calculation uses independent test sample test (t-test) with the help of SPSS software. The calculation results can be presented as follows:

Table 13 Test Results Differences Postes Learning Results Civics Students

Levene's Test for Equality of Variances			t-test for Equality of Means						
Equal variances	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Assumed	.046	.830	3.799	60	.000	7.290	1.919	3.452	11.129
not assumed			3.799	59.983	.000	7.290	1.919	3.452	11.129

Based on Table 13 above shows that both postes of students' learning outcomes have tcount (3,799)> ttable (1,671) and sig.2-tailed (0,000) < $\alpha = 0,05$ so H0 is rejected. Based on the results of these calculations can be raised the conclusion that the two classes have the average postes of learning outcomes of Civics are not the same or different.

IV. Discussion

Based on the results of hypothesis testing put forward the conclusion that jigsaw learning strategies affect the student's learning outcomes. The implementation of pretest and postes in the jigsaw class has increased the average of students' learning outcomes that is 52.10 has increased to 87.03. The results of this study prove that the learning strategy used has an important role in the implementation of learning conducted by teachers. Therefore, in the implementation of learning teachers should really pay attention and choose the learning strategy in accordance with the material presented. Miarso asserts that learning strategy is a comprehensive approach to learning in a learning system, which is a general guideline and framework of activities to achieve the general objectives of learning, which are outlined from a philosophical view or a particular learning theory.

Teachers have an important role in selecting and applying appropriate learning strategies in the implementation of classroom learning. The ability of teachers in choosing and using learning strategies has an impact on improving the success of learning. It is also confirmed by Sanjaya that a learning process successfully achieved the goal which is the result of interaction and interrelation of the components that make up the learning system. These components are objectives, subject matter, learning strategies, media and evaluation. Each component will affect the success of the learning process and will affect the successful achievement of learning objectives. One such component is learning strategy. Successful achievement of goals is largely determined by this component. One of the learning strategies that teachers can use is cooperative learning strategy. Solihatin said that cooperative learning is a learning strategy in which students learn and work in small groups collaboratively whose members consist of four to six people, with heterogeneous group structure. Furthermore, it is said, the success of learning from the group depends on the ability and activities of group members, both individually and in groups. Cooperative learning puts students as part of a system of cooperation in achieving an optimal outcome in learning.

The results of this study are also in accordance with research Yulaikah conduct research Jigsaw Application to Improve Student Results Elementary School [15]. The results of the research analysis put forward the conclusion that with the application of cooperative learning model Jigsaw type, it can improve student learning outcomes, especially on the subject matter of the solar system. This is shown from the results of observational data analysis at the time of learning, which found that, the average ability of learning results increased on learning the teaching materials.

Based on the results of research obtained average student learning outcomes taught by using jigsaw learning strategy of 87.03, while taught with conventional strategy of 79.74. The results of this study prove that student learning outcomes taught by using jigsaw learning strategy is higher than using conventional learning strategy. The result of hypothesis test proves that both posttest data of learning result of Civics using jigsaw

learning strategy and conventional learning strategy have $t_{count} (3,799) > t_{table} (1,671)$ and sig.2-tailed $(0,000) < \alpha = 0,05$ so H_0 is rejected. Based on the results of these calculations can be raised the conclusion that the two classes have average postes of learning outcomes of Civics are not the same or different. Slavin asserts that cooperative learning strategy jigsaw is a type of cooperative learning that encourages students to actively and assist each other in mastering the lesson materi to achieve maximum results. Students are grouped into small groups. In the application of jigsaw type cooperative learning, students are divided into 5-6 group members. Ibrahim argues that the characteristics of cooperative learning strategy jigsaw that students work in groups cooperatively complete learning materials, groups formed from students who have high ability, moderate, and low, appreciation more group-oriented than individuals.

Implementation of jigsaw learning strategy considers that students are individuals who have the ability and limitations, for that in learning students need to be organized in such a way that between one another fill each other and together they have the same knowledge and skills. This is in accordance with the learning objectives that the purpose of learning activities in the classroom is to achieve the learning objectives of students together. The results of this study in line with previous research conducted by Yani research on Cooperative Learning Jigsaw Type On The Concept Digestive System Human Food Against Student Results SMA Negeri 1 Sakti Pidie. Based on the results of the analysis of further research data can be put forward the conclusion that there are differences in student learning outcomes taught by cooperative learning model Jigsaw with students taught with conventional learning model. Based on some opinions and the results of previous studies above, it can be concluded that the results of student learning using jigsaw learning strategies considered to have a better influence than using conventional learning strategies. This is because the jigsaw learning strategy of active students in group learning until the learning is able to provide student motivation during learning..

V. Conclusion

Based on the results of the analysis of research data, it can be put forward the following conclusions:

1. Jigsaw learning strategy has an effect on student's learning outcomes. The influence of the jigsaw learning structure on student learning outcomes is evidenced by the increase in student learning outcomes after the pretest and post test.
2. There are differences in students' learning outcomes using a jigsaw strategy with conventional strategies. Differences in learning outcomes evidenced by student learning outcomes on the jigsaw class of students is higher than the results of students learning conventional class Civics.

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