

Cooperative Learning in the Learning Activity of Students

Rendika Vhalery*, Nofriansyah**

Universitas Negeri Padang**

* rendikavhalery31@gmail.com / rendikavhalery@student.unp.ac.id
** nofriansyah10@gmail.com / nofriansyah@student.unp.ac.id

DOI: 10.29322/IJSRP.8.9.2018.p8110
<http://dx.doi.org/10.29322/IJSRP.8.9.2018.p8110>

Abstract- This study is aimed at comparing team-assisted individualization learning model and scramble learning model toward student's learning activities on social science subject, SMP Negeri 19 Palembang. This is a comparative study using a completely randomized design. The population of this study was all eighth grade classes consisting of 354 students. Cluster random sampling was used to decide the sample of this study in which class VIII.10 as experiment-1 and VIII.9 as experiment-2; Each class consists of 35 students. The technique of data collection used in this study was observation. SPSS 24.0 was used to analyze the data. The result shows that there are active learning activities. Statistically, scramble learning model is more interesting than team-assisted individualization learning model.

Keyword : *team-assisted individualization; scramble; activities*

I. INTRODUCTION

Talking about education means talking about the nation's generation. The education system in Indonesia is governed by the Law of the Republic of Indonesia number 20 of 2003. Activities in the field are closely related to Permendikbud number 22 of 2016 about the standard of educational process that contains the learning process planning, implementation of learning process, assessment of learning outcomes, and supervision of the learning process. The main focus of the process standard is the planning of learning process including syllabus and learning implementation plan (RPP) (Kemdikbud, 2016). Syllabus is the basic framework for the development of lesson plans. The learning implementation plan is prepared for the learning process activities.

The components of the learning implementation plan consist of the school's identity which is the name of the education unit, the subject's identity or theme / sub-theme, class / semester, main subject, time allocation, learning objectives formulated based on basic competencies, basic competencies and indicators of competency achievement, learning materials, learning methods, learning media, learning resources, learning steps, and assessment of learning outcomes (Kemdikbud, 2016). Ideally, the points of learning method are often ignored by some teachers. Teachers often use traditional methods such as lectures that become learning centers and students just listen, take notes, and do sums (Kurniawan & Suripno, 2016). As a result students become not interested in following the learning process and more often do other activities that are less useful when they should be studying. Teachers should understand that effective learning is a learner-centered learning that enhances achievement, motivation, cognition, activity, and social life of the students (Zakaria, Solfitri, Daud, & Abidin, 2013; Johnson & Johnson, 2014).

Learning activities are activities undertaken by students when participating in the activities of learning in the classroom. The activities of students in the learning process can be categorized as determinant factors. If students do not have learning activities then students are not motivated to learn and the attention of students on the learning process will be reduced and become passive students. However, students who have good learning activities will participate in the learning process so that students can develop the talents, abilities, and skills possessed. Simply put, active students will understand and know the materials given more optimally than the passive students. Learning activities correlates with the physical and mental state of the students. Therefore, learning activities need to be presented in the learning process through one of the learning methods and the cooperative learning model is perfect for this problem (Gupta & Pasrija, 2016).

Slavin (1984; 2014) revealed that cooperative learning models connect teachers with students to create an effective learning process. The reward system existing in the cooperative learning model makes the learner enthusiastic (Slavin, 2014). The cooperative learning structures form students into small groups or large groups to work together while the teacher works as a facilitator (Davidson, Major, & Michaelsen, 2014). Cooperation among students increases their trust, psychological, cognitive, and social networks aspects (Angela MO'Donnell, 2006). The cooperative learning model consists of several types, including Student Teams Achievement Devision, Team Game Tournament, Learning Together, Team Assisted Individualization, Make A Match, Jigsaw, Talking Stick, Co-op Co-op, Group Investigation and Sramble (Gambari & Yusuf, 2014; Gupta & Pasrija, 2016; Ma'ruf, 2018). This study focuses on cooperative learning model of team assisted individualization and scramble type.

According to Pramestasari & Qohar (2016) the learning model of Team Assisted Individualization is a cooperative learning model that combines the concept of individual learning and group learning in cooperative groups (small or large). Team Assisted Individualization learning model can also help create an effective learning atmosphere and can solve the academic problems of students (Tinungki, 2015). Behavioral, cognitive, and social formation can also occur during the learning process (Tilaar, 2014). The learning model of team assisted individualization can stimulate students to develop their intellectual ability to become more active (Zakaria et al., 2013). In the implementation of the learning model team assisted individualization students learn in a group consisting of 4-5 people (Huda, 2013). If one member of the group has difficulty in learning, then a group of friends will be an assistant to help him overcome his learning difficulties (Lau, Kwong, Chong, & Wong, 2013). Teachers are only limited to guide, direct, and become a reference to ask, because this model is centered on students (student centered) so as to increase learning activities of students in the learning process. Romiyati, Akhdinirwanto, & Ngazizah (2012) proved that the use of team teaching model assisted individualization can improve students' learning activities. On the other hand, Hasmyati (2017) explained that the learning model of team assisted individualization is less efficient than other cooperative learning models. Therefore, this study tries to clarify the difference of the argument.

Another cooperative learning model is the Scramble learning model. The scramble learning model helps the learning process in the classroom become active because it involves all students. The scramble learning model is used to improve and develop the students' mindset because it requires students to use and combine right-brain and left-brain performance in the learning process (Huda, 2013). In the implementation, it begins with the teacher presenting the material according to the topic studied. Teachers create study groups and share prepared worksheets for each group. Group members compile and match the questions and answers to get the right answer (Ma'ruf, 2018). In the learning activities of students, the use of this learning model is very effective and efficient because this learning model helps students understand the subject, encouraging students to think quickly, accurately and ready to answer questions from the teachers. Sugiarta (2012) proved that the learning model of Scramble can improve the activity and learning outcomes of students.

The use of cooperative learning model of team assisted individualization and scramble type is understood by the teacher as a theory only. It is feared that lack of knowledge and practice will become a problem one day. In addition, this learning model has not given direct contribution. Therefore, the study is expected to contribute and become a reference to avoid and minimize the impact. The study will conduct experiments using the team assisted individualization learning model and the scramble learning model in the experimental class. In particular, this study aims to find out the answers to the following questions.

- 1) To which extent is the influence of the learning model of team assisted individualization on the learning activities of students ?
- 2) To which extent is the influence of learning model scramble on the learning activities of students ?
- 3) The comparison of learning models of team assisted individualization and model learning sramble ?

The next discussion consists of several parts. Part 2 is a method that discusses the procedure of data collection and data analysis. Section 3 presents the results of research and discussion briefly. Section 4 conclusions from this study.

II. METHOD

The population of this study is class VIII students consisting of ten classes with 354 people. Cluster Random Sampling sampling technique was performed to determine experiment class 1 and experiment class 2. Steps in sample taking for experiment 1 and experiment 2 is as follows. First, preparing the class data to be sampled for the experimental class 1 and the experimental class 2. Second, writing each class on a piece of paper then rolled and put into two boxes (one box containing five rolls of paper) then drawn. After that, Taking one roll of paper from each box to determine the sample. Thirdly, after the draw was obtained two classes, namely class VIII.10 as experimental class 1 and class VIII.9 as experiment class 2.

This type of study is comparative using Completely Randomized Design. Using pre and post observations. Using two experimental classes of experimental class 1 and experiment class 2. The learning in the experimental class 1 uses the Team Assisted

Individualization learning model and the learning in the experimental class 2 using the Scramble learning model. This activity was conducted 5 times with the details such as; the 1st meeting of pre-observation before being treated by the learning model, the 2nd meeting until the 4th meeting is treated by Team Assisted Individualization and the 5th post-observation after being treated by the model of learning. Meanwhile, class VIII.9 was treated with Scramble learning model. This activity was conducted 5 times meeting with details such as; the 1st meeting of pre-observation before being treated by the learning model, the second meeting until the 4th meeting was given the Scramble study and the fifth post-observation post after being treated by the learning model.

1.1 Steps of using the learning model in the experimental class

1.1.1 Preparation Phase

- 1) Selecting two experimental classes: experimental class 1 and experiment class 2 for the use of learning model.
- 2) Creating a learning plan and preparing learning resources to implement the learning process.
- 3) Using the Team Assisted Individualization learning model in the experiment class 1 and using the experimental classroom Scramble in experiment class 2.
- 4) Develop assessment instruments (observation).
- 5) Test the validity of assessment instruments.

1.1.2 Implementation Phase

- 1) Conducting the learning process by applying the Team Assisted Individualization learning model and the Scramble learning model.
- 2) Providing learning materials about the demand to students using charta media.
- 3) Form a small group consisting of 5 members.
- 4) Assessment of observation at each meeting about the application of the model and see the learning activities of students in learning.

1.1.3 Completion Phase

- 1) Analyze the students' learning activities data from the observation.
- 2) Analyze data on the implementation of the Teaching Assisted Individualization model and the Scramble learning model.
- 3) Analyze the observed data that has been collected to see the effect of the Team Assisted Individualization learning model and the Scramble learning model.
- 4) Hypothesis testing.
- 5) Conclusion of the use of learning model.

III. RESULTS AND DISCUSSION

This study aims to find out the extent to which the influence of learning model team assisted individualization and learning model of learning scramble. Then the comparison of team assisted individualization model is being compared with the scramble learning model. The Comparison of learning model of team assisted individualization and scramble will be using t-test. Learning model experimental results are described as follows.

1.2 The Influence of Learning Model of Team Assisted Individualization on students activity of students

1.2.1 The Use of Team Assisted Individualization Learning Model

Regression analysis statistic test was used to see the effect of cooperative learning model of type assisted individualization team to the learning activities of students on IPS subjects. The regression estimation model used is $Y = a + bx$ to see the decrease or increase of learning activity. Results of data processing regression with the help of SPSS 24.0 program can be seen in table 1 and table 2 as follows.

Table 1. The use of the team assisted individualization learning model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3667,009	1	3667,009	287,181	,000
	Residual	421,376	33	12,769		
	Total	4088,386	34			
	R			,947		
	R Square			,897		
	Adjusted R Square			,894		
	Std. Error of the Estimate			3,573		

The result of using the assisted individualization team learning model (table 1) shows that the F value is 287,181 with the sig level. $0.000 < 0,05$ which means the learning model of team assisted individualization influences the learning activity of the students significantly. R square = 0,897 means the contribution of learning model of assisted individualization team to learning activity equals to 89,7%, whereas 10,3% is determined by factor other. The result of regression coefficient of team learning model assisted individualization can be seen in table 2 below.

Table 2. Coefficient of learning model of TAI in learning activities of students

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1	(Constant)	-122,405	10,436	-11,729	,000
	Learning activity	1,906	,112	,947	,000

Based on the regression estimation model used, $Y = -122,405 + 1,906 X$. The constant value of -122,405 shows that without the use of team assisted individualization learning model, student learning activity is below average. The value of t arithmetic 16.946 and sig level. $0.000 < 0,05$, meaning each use 1 unit of learning model assisted individualization team will increase 1,906 per student activity unit.

1.2.2 Description of learning activities of students

The experimental activity in the implementation of the Team Assisted Individualization learning model shows the result of the improvement of students' learning activities on the social studies subjects. Increased activity is seen through observations made at the time before and after the applied model of learning Team Assisted Individualization. The results of learning activities are interpreted into several criteria that can be seen in table 3 below.

Table 3. Rating criteria before and after use of TAI learning model

Score	Criteria	Before		After	
		Student	%	Student	%
86 - 100	Very Active	0	0%	32	91,4%
71 - 85	Active	2	5.7%	3	8,6%
56 - 70	Enough	17	48.6%	0	0%
41 - 55	Less Active	11	31.4%	0	0%
0 - 40	Very Less Active	5	14.3%	0	0%
	Total	35	100%	35	100%
	Smallest score	35		83	
	Highest score	74	54,5%	100	91,5%
	Interpretation	Less Active		Very Active	

Based on table 3 it could be seen the differences in learning activities of students in the learning process before and after being treated by the model learning Team Assisted Individualization. Prior to the use of the learning model of Tested Assisted Individualization, the smallest score in experiment 1 was 35 and the highest score was 74 with an average grade of 54.5% in the less active category. That is, the level of learning activities of students prior to the use of learning model Team Assisted Individualization is less active which causes students to be passive and lazy to learn. Individually known as many as 5 (14,3%) students are in very less active category, 11 (31,4%) students are in less active category, 17 (48,6%) students are in active enough category, and only 2 (5.7%) of the students are in the active category. That is, most of the students in experiment 1 class have enough learning activity that leads to less active.

After the implementation of the team learning assisted individualization team, it was found that the smallest value in experimental class 1 was 83 and the highest score was 100 with an average of 91.5% in the very active category. Individually known as many as 3 (8.6%) of students who are in the active category and as many as 32 (91.4%) of the students are in very active category. This indicates that there is an increase in learning activities of students individually and on average at a rate of 37%. Comparison before and after can be described graph as follows:

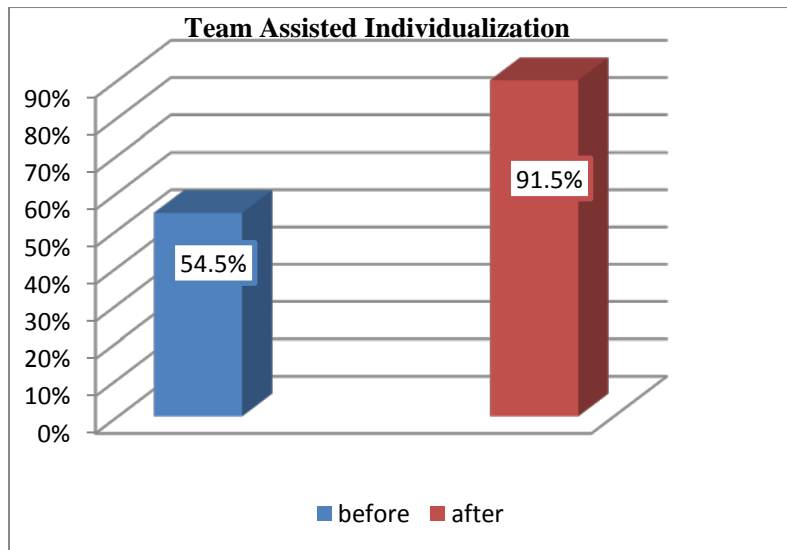


Figure 1. The results of observation before and after the application of the TAI Learning model

1.2.3 Implementation of team assisted individualization team learning model

Implementation of learning model is done as much as 4x to 5x meeting in experiment class 1. Implementation of team assisted individualization learning model follows the terms and rules of learning model steps that have been set by some source. The observation result of learning model implementation is converted into value to be interpreted. The results of the implementation of the team assisted individualization learning model can be seen in table 4 below.

Table 4. Implementation of team teaching model assisted individualization

Weeks	Percentage	Criteria
1	71.4%	Good
2	85.7%	Very Good
3	100%	Very Good
4	100%	Very Good
Average	89.3%	Very Good

The results of the implementation of the team assisted individualization learning model (table 4) shows that the implementation at the first meeting obtained a percentage of 71.4% which falls to the very good category. That is, the implementation of the team assisted individualization learning model at the 1st meeting is still not structured or there are some steps of the team assisted individualization team learning model that has not been applied. The implementation of the team assisted individualization learning model at the second meeting increased by 14.3% becoming 85.7% which falls to the very good category. That is, the implementation of the team assisted individualization learning model at the second meeting began to improve because of the mistakes in the implementation of the model of assisted individualization team learning began to be minimized. The implementation of the team assisted individualization learning model in the third and fourth meetings obtained a percentage of 100% which falls into a very good category. This shows that the implementation of the team assisted individualization learning model at the 3rd and 4th meetings meet the applicable terms and conditions. The average implementation of the team assisted individualization learning model for 4x meetings was 89.3% with very good category. That is, the learning model assisted individualization team implemented according to terms and conditions optimally.

1.3 Effect of Learning Model of scramble on learning activities of students

1.3.1 Use of Scramble learning model

Regression analysis is also done on the model of cooperative type learning scramble to see the effect on the learning activities of students on IPS subjects. The regression estimation model used is also the same ie $Y = a + bx$ to see the magnitude or the contribution of the learning model of the scramble to the students' learning activities. Results of data processing regression with the help of SPSS 24.0 program for this learning model can be seen in table 5 and table 6 as follows.

Table 5. Use of Scramble learning model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2691,070	1	2691,070	755,044	,000
	Residual	117,616	33	3,564		
	Total	2808,686	34			
	R			,979		
	R Square			,958		
	Adjusted R Square			,957		
	Std. Error of the Estimate			1,888		

The result of using scramble learning model (table 5) shows that the value of F calculated 755,044 with sig level. $0,000 < 0,05$, which means that the learning model has significant effect on the learning activities of the students. The value of R square = 0.958 means the contribution of learning model scramble to learning activity of 95.8%, while 4.2% is determined by other factors. The result of regression coefficient of learning model of scramble can be seen in table 6 below.

Table 6. Coefficient of learning model of Scramble on learning activities of students

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-38,542	3,584		-10,755	,000
	Learning Activity	1,131	,041	,979	27,478	,000

Based on the regression estimation model used, $Y = -38,542 + 1,131 X$. The constant value of -38,542 shows that without the use of scramble learning model, student learning activity is also below average. The value of t arithmetic 27,478 and sig level. $0,000 < 0,05$, meaning each use 1 unit of learning model of scramble will increase 1,131 unit of students activity learning.

1.3.2 Description of learning activities of students

The activities in the experimental class-2 in the application of the scramble learning model show the result of the improvement of students' learning activity on the social studies subjects. The impact of this activity is seen through the observations made before and after the application of the scramble learning model. The results of learning activities are interpreted into several criteria that can be seen in table 7 below.

Table 7. Rating criteria before and after use of scramble learning model

Score	Criteria	Before		After	
		Student	%	Student	%
86 - 100	Very Active	0	0%	15	42.9%
71 - 85	Active	4	11,4%	20	57.1%
56 - 70	Enough	21	60%	0	0%
41 - 55	Less Active	10	28,6%	0	0%
0 - 40	Very Less Active	0	0%	0	0%
	Total	35	100%	35	100%
	Smallest score	42		72	
	Highest score	76	59%	100	86%
	Interpretation	Less Active		Very Active	

Table 7 shows the differences in learning activities of students in the learning process before and after being given a model of experimental learning in the classroom experimental study 2. Before the use of learning model scramble is known the smallest value of experimental class 2 is 42 and the highest score is 76 with an average score of 59% active. The level of learning activity of the learner before the use of the instructional model is sufficient. That is, the students in the experimental class have average learning activity (normal). However, individually known as many as 10 (28.6%) of the students are in less active category, 21 (60%) students are in enough active category, and 11 (11.4%) of the students are in very active category. Most students in experiment 2 class have sufficient learning activity. However, for classical learning this is doubtful let alone some students are in the less active category.

After the implementation of the scramble learning method the smallest value in experiment class 2 is 72 and the highest value is 100 with an average value of 86% which is in the very active category. Individually known as many as 20 (57.1%) of students who are in the active category and as many as 15 (42.3%) of the students are in very active category. This indicates that there is an increase in the learning activities of students individually and on average by 27%. The comparison of before and after of students treated with scramble learning model can be drawn on the graph as follows:

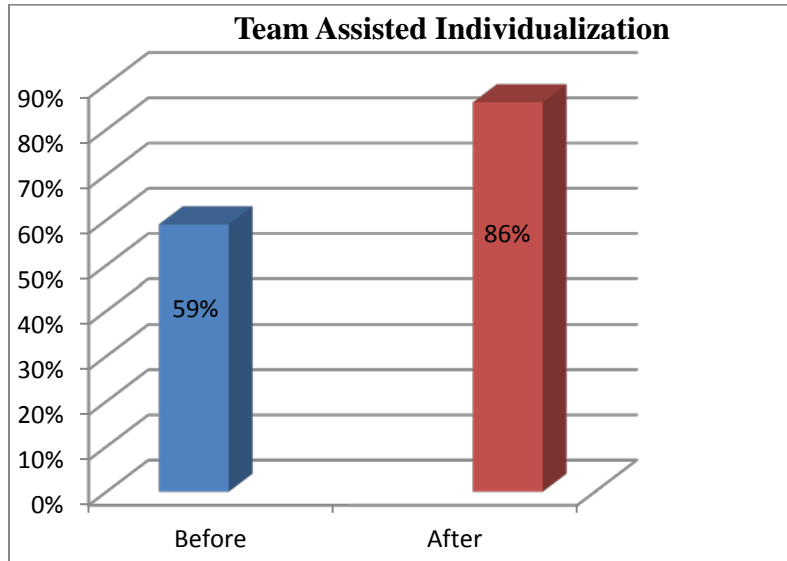


Figure 2. The results of observation before and after the application of the Scramble Learning model

1.3.3 Implementation of the Scramble learning model

The implementation of the scramble learning model is 4x out of 5x meetings in the experimental class 2. The implementation of the scramble learning model follows the terms and rules of the scramble learning model steps that have been set by several sources. The result of observation of the implementation of the scramble learning model is converted into value to be interpreted. The results of the implementation of the scramble learning model can be seen in table 8 below.

Table 8. Implementation of scramble learning model

Weeks	Percentage	Criteria
1	77.8%	Good
2	88.9%	Very Good
3	100%	Very Good
4	100%	Very Good
Average	91.7%	Very Good

The results of the implementation of the scramble learning model (table 8) shows that the implementation at the first meeting obtained a percentage of 77.8% which falls into the good category. That is, the implementation of the scramble learning model at the 1st meeting has not been applied optimally because there are several steps of scramble learning model that is not or has not been applied. Implementation of scramble learning model at the second meeting increased by 11.1% becoming 88.9% which falls into the very good category. That is, the implementation of the team assisted individualization learning model at the 2nd meeting began to improve and the application of learning models of scramble begin to be structured and according to the rules. Implementation of scramble learning model at the third and fourth meeting obtained a percentage of 100% which falls into the very good category. This suggests that the implementation of the scramble learning model at the 3rd and 4th meetings is carried out in accordance with the scramble learning steps. The average implementation of the scramble learning model for 4x meetings was 91.7% with very good category. That is, the learning model scramble implemented according to procedures that have been set optimally.

1.4 Comparison of TAI and Scramble learning models

1.4.1 Comparative test of learning model

In line with the initial objective of this study which is to examine the use of team assisted individual model and scramble learning model and compare these two learning models to see the differences between the team assisted individual modeled learning model and

the learning model of the scramble on the learning activities of the students in the social studies subjects. Comparison of learning models used t test with the help of SPSS 24.0 obtained the output results in table 9 and 10 as follows.

Table 9. Group statistics cooperative learning model

Learning Model		N	Mean	Std. Deviation	Std. Error Mean
Learning	TAI	35	92,6571	5,45000	,92122
Activity	Scramble	35	86,7429	7,86782	1,32990

Table 9 shows that the mean value of the team assisted individualization learning model is 92.6 while the mean value of the scramble learning model is 86.7. That is, the level of learning activity through the team assisted individualization team learning model is higher than the level of learning activity through the scramble learning model. Comparison of further cooperative learning model can be seen in table 10 as follows.

Table 10. Comparison of learning models

		Levene's Test		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Lower Upper	
Learning activities	Equal variances assumed	4,590	,036	3,656	68	,001	5,91429	1,61780	2,68601	9,14256
	Equal variances not assumed			3,656	60,522	,001	5,91429	1,61780	2,67877	9,14980

The statistical results of t-test (table 10) is the t value of 3.656 with sig value. $0.000 < 0,05$ which means the H_0 is rejected and H_a accepted. This means that there is a significant comparison between the cooperative learning model type assisted individualization team with a model of learning scramble on learning activities of students on social studies subjects.

1.4.2 Differences in the use of TAI learning models with Scramble based on observations

The comparison is being given between the use of cooperative learning model in experimental class 1 and in the experimental class 2. The learning model of team assisted individualization in the experimental class has the contribution value of 89.7% and the experimental model of experimental class 2 has a contribution value of 95.8%. The results of the analysis show that the use of Scramble learning model has advantages over the Team Assisted Individualization learning model. However, a difference of 6.1% cannot be ascertained that the scramble learning model is better than the team assisted individualization learning model. Overall, the Team assisted individualization learning model is rated better than the scramble learning model.

The use of the team assisted individualization learning model can increase the learning activities of students from less active to be very active. The statistical results show that the use of 1 unit of learning model assisted individualization team can increase as much as 1.906 units of learning activities of students while the use of 1 unit of learning model of scramble can increase 1,131 units of learning activities. That is, the use of team teaching model assisted individualization has a higher influence than the model of learning scramble. This is evidenced through the influence of the use of learning model with regression analysis and comparison of previous learning model. In addition, this difference can also be seen from the observation before and after the implementation of experimental learning model class that can be seen in Figure 3 below:

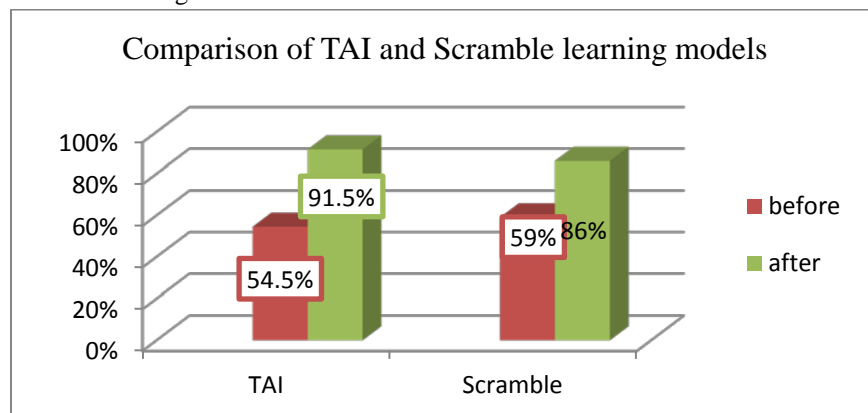


Figure 3: differences before and after the use of learning models

Based on Figure 3 it is known that the increase of student learning activity in experiment-1 class is 37% while in class of experiment-2 is 27%. A 10% difference indicates that the team assisted individualization learning model is better than the scramble learning model. Ideally, the previous t-test should support this assumption. It was concluded that the learning model of team assisted individualization type was superior to the cooperative model of the type of scramble to improve or trigger the learning activities of the students in the social studies subjects.

IV. GET PEER REVIEWED

Here comes the most crucial step for your research publication. Ensure the drafted journal is critically reviewed by your peers or any subject matter experts. Always try to get maximum review comments even if you are well confident about your paper.

For peer review send your research paper in IJSRP format to editor@ijsrp.org.

V. FINDING

At the time of using cooperative learning model in experiment 1 and experiment 2 class were found some benefits and constraints of the team assisted individualization model and the scramble learning model. Some of the benefits of implementing the team assisted individualization learning model can be explained as follows. First, quiet students (rarely communicate or alienated) are getting used to communicating with other students. Second, students who do not dare to express opinions become more daring to express their opinions. Third, the quiet classroom becomes noisy because of the "light up" learning activity. Fourth, caring, helping each other, respect, and responsibility towards fellow students gradually increase. Fifth, the loss of status (rich vs poor) among students. Sixth, the relationship between teachers and students become closer. On the other hand, there are some obstacles encountered when implementing the team assisted individualization learning model. First, the timing of group learning is often missed, requiring additional time. Second, the less intelligent students will rely on clever students. This dependence can lead to debate and hostility between them. Third, the "lighted" classroom atmosphere can interfere with learning activities in other classes.

The findings of the study on the use of the scramble learning model are not much different from the use of the team assisted individualization learning model. There are several different and evolving points of application of this model. First, the social life of students (such as responsibility, cooperation, caring, and help) increases directly. Second, the structure of group cooperation shapes the soul of the leadership of the students so that they share their duties and are responsible for the tasks they get. Third, the psychological needs of students develop and increase (such as pleasure, smile, attention, reaction, and relaxation) because this learning model combines games and learning (Shoimin, 2013). Fourth, the accuracy and discipline of students on the learning process improves the power of concentration and ability of memory and thinking power. This is known from the results and learning achievements of students. Fifth, the participants' learning motivation gradually increases. And on the use of Scramble learning model some obstacles are also found. First, when students answer questions from teachers. Students need additional time to answer the question sheet. Second, the scramble learning model cannot be applied to certain subject matter (such as learning materials that require creativity or critical thinking).

VI. CONCLUSION

The cooperative learning model of team assisted individualization and scramble type is very effective to solve academic problems (such as learning outcomes, learning achievement, learning activities), psychological problems (such as learning behavior, thinking ability, skill, happiness, comfort) and social problems (such as cooperation, respect, social relations, communication, responsibility, status and gender differences). This cooperative learning model is very suitable to be applied to IPS subjects or subjects that relates with theoretical studies.

The learning model of team assisted individualization and the scramble learning model have some similarities. First, the team-assisted individualized learning model and the scramble learning model focus on the students so that the learning activities they perform (see, perform, argue) will have an impact on their memory. Second, the team assisted individualization modeled learning model and the scramble learning model trigger students' learning activities during the learning process so that they are motivated and become active. Third, the learning model of team assisted individualization and learning model scrambles remind teachers to respect their students. Fourth, the team learning model assisted individualization and the scramble learning model strengthen the relationship of teachers and students.

The learning model of team assisted individualization and the scramble learning model also have some differences (such as focus, purpose, and function). The first difference refers to the focus of the learning model, the team assisted individualization teaching model focuses on peer tutors to help group members understand the subject matter while the scramble learning model focuses

on the accuracy and speed in understanding the subject matter. The second difference refers to the purpose of the learning model, the team assisted individualization learning model aims to establish external relationships while the scramble learning model aims to develop internally. The third difference refers to the function of the learning model, the model of assisted individualization team learning has the function of eliminating status differences (rich vs poor, race, culture, etc.) while the scramble learning model serves as a forming of a competitive personality.

REFERENCES

- Angela MO'Donnell, R. (2006). Cooperative and Collaborative Learning, 1–8. <https://doi.org/DOI:10.1002/0470018860.s00672>
- Davidson, N., Major, C. H., & Michaelsen, L. K. (2014). Small-Group Learning in Higher Education — Cooperative , Collaborative , Problem-Based , and Team-Based Learning : An Introduction by the Guest Editors. *Journal on Excellence in College Teaching*, 25, 1–6.
- Gambari, I. A., & Yusuf, M. O. (2014). Effects Of Three Cooperative Learning Strategies On The Performance Of Secondary School Students In Physics. *Bulgarian Journal of Science Education*, 23(3), 1–23.
- Gupta, M., & Pasrija, P. (2016). Co-Operative Learning: an Efficient Technique To Convert Students Into Active Learners in Classrooms. *MIER Journal of Educational Studies, Trends and Practices*, 2(1). Retrieved from <http://mierjs.in/ojs/index.php/mjstjp/article/view/59>
- Hasmyati, S. (2017). Comparative Cooperative Learning Type NHT (Numbered Head Together) and TAI (Team Assisted Individualization) Volleyball Classes at Junior High School in Makassar , Indonesia. *International Journal of Science and Research*, 6(9), 2015–2018. <https://doi.org/10.21275/ART20176821>
- Huda, M. (2013). *Model Pengajaran Dan Pembelajaran : Isu – Isu Metodis Dan Paradigmatis*. Yogyakarta: Pustaka Pelajar.
- Johnson, D. W., & Johnson, R. T. (2014). Cooperative Learning in 21st Century, 30, 841–851.
- Kemdikbud. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 22.Tahun 2016 Tentang Standar Proses Pendidikan Dasar dan Menengah, Republik Indonesia § (2016). Indonesia.
- Kurniawan, A., & Suripno. (2016). Efektivitas Model Cooperative Learning Tipe Team Assisted Individualization (Tai) Dalam Upaya Peningkatkan Kerjasama Dan Hasil Belajar Pendidikan Kewarganegaraan Kelas Viii Di Smp Negeri 15 Purworejo. *Jurnal Pendidikan Kewarganegaraan Dan Hukum*.
- Lau, P., Kwong, T., Chong, K., & Wong, E. (2013). Developing students ' teamwork skills in a cooperative learning project. *International Journal for Lesson and Learning Studies*, 3(1), 80–99. <https://doi.org/10.1108/IJLLS-03-2013-0018>
- Ma'ruf, S. I. (2018). Model Pembelajaran Scramble, 1–6.
- Pramestasari, E. A., & Qohar, A. (2016). Application Of Guided Journal In Cooperative Learning In Team Assisted Individualization (Tai) Type To Support Mathematical Communication Capability Of Class Viii-A Students At Smp Negeri 2 Malang. *IOSR Journal of Research & Method in Education*, 6(5), 71–76. <https://doi.org/10.9790/7388-0605037176>
- Romiyati, A., Akhdinirwanto, R. W., & Ngazizah, N. (2012). Peningkatan Aktivitas Belajar IPA Fisika Dengan Menggunakan Model Pembelajaran Team Assisted Individualisation (TAI) Pada Siswa SMP Negeri 2 Kepil Wonosobo. *Radiasi.Asif Romiyati*, 1(1), 49–51. Retrieved from <http://download.portalgaruda.org>
- Shoimin, A. (2013). *Model Pembelajaran Inovatif Dalam Kurikulum 2013*. Yogyakarta: Ar-ruzz Media.
- Slavin, R. E. (1984). Team Assisted Individualization : Cooperative Learning and Individualized Instruction in the Mainstreamed Classroom. *Remedial and Special Education*. <https://doi.org/10.1177/074193258400500606>
- Slavin, R. E. (2014). Cooperative Learning and Academic Achievement : Why Does Groupwork Work? *Anales de Psicología*, 30, 785–791. Retrieved from <http://dx.doi.org/10.6018/analesps.30.3.201201>
- Sugiarta, K. (2012). Penerapan Model Pembelajaran Kooperatif Tipe Scramble Untuk Meningkatkan Aktivitas Dan Hasil Belajar Siswa Kelas XI Sma Saraswati Singaraja Pada Mata Pelajaran Ekonomi Tahun Pelajaran 2011/2012.
- Tilaar, A. L. F. (2014). Effect of Cooperative Learning Model Type of Team Assisted Individualization (TAI) and the Performance Assessment of Learning Achievement to Linear Program Course. *International Journal of Science and Engineering* <http://dx.doi.org/10.29322/IJSRP.8.9.2018.p8110>

Investigations, 3(24), 25–29.

Tinungki, G. M. (2015). The Role of Cooperative Learning Type Team Assisted Individualization to Improve the Students' Mathematics Communication Ability in the Subject of Probability Theory. *Journal of Education and Practice*, 6(32), 27–31.

Zakaria, E., Solfitri, T., Daud, Y., & Abidin, Z. Z. (2013). Effect of Cooperative Learning on Secondary School Students' Mathematics Achievement, 4(2), 98–100.