

**INCREASING LEARNING RESULTS STUDENTS OF ELEMENTARY SCHOOL
THROUGH TEAMS GAMES TOURNAMENT LEARNING****Ramdhan Witarsa¹, Yosi Indriastuti², Fini Fitriani³, Ai Tintin Suhartini⁴, Andriyanti Rosmaya⁵,
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⁶ SDN Utama 3 Cimahiramdhansatu@gmail.com**ABSTRACT**

The purpose of the implementation of Classroom Action Research (CAR) is to improve the learning outcomes of science materials in the Human Senses SDN Ciampel. The implementation of CAR is done through two cycles where each cycle consists of four stages: (1) planning, (2) implementation of action, (3) observation, and (4) reflection. Data collection techniques are done at the end of the cycle using tests, observations, and documentation. The success indicator of this CAR is the learning outcomes of learners who achieve the Minimum Exhaustiveness Criteria (MEC) is greater than 60 as many as 80% of learners, as well as the appearance of teachers in learning above the score 80. Results of research obtained from the assessment of learning outcomes of learners class IV in cycle I that is: average class 51,95; with mastery learners learn 69,56%; the value of teacher performance 88.07%. Learning outcomes in cycle II are: average class 77.83; with learners learning completeness 91,30%; the value of the teacher's appearance is 91.20%. The conclusion of this research is that the learning of TGT can improve the science learning result of the students of the human sense tool material in the fourth grade students and can improve the performance of teachers in the learning at SDN Ciampel.

Keyword: Learning, Cooperative Learning, TGT.

INTRODUCTION

Education plays an important role for the intellectual life of the nation and develop the Indonesian people ideally. Law No.20 of 2003 article 1 reveals that education is a conscious and planned effort to create an atmosphere of learning and learning so that learners are actively developing their potential to have spiritual spirituality, self-control, steady personality, intelligence, noble character, and skilled will many things needed him, society, nation, and country.

Witarsa (2017) reveals that learners can achieve many things needed by him if in learning can work together well, communicate well, and believe in himself. The necessary needs can be obtained through education in Elementary School (ES) which is integrated into various subjects, one of them science subjects. Science is a subject that can equip learners in many ways, including logical thinking skills, analysis, systematic, critical, and creative. These skills are needed so that learners are able to obtain, manage, and use information to survive in the future where the situation will be more dynamic and competitive.

Ironically, science is still regarded as a difficult subject for both learners and teachers. This is most likely caused by the lack of motivation and desire of teachers in developing creative science learning. The lack of motivation of learners was seen to be this. Learning

difficulties of these learners also appear in the fourth grade students SDN Ciampel West Bandung regency (KBB). Teachers' difficulties include lack of skill in making the Lesson Plans (RPP), especially in making learning steps and in determining appropriate learning strategies.

In science learning in grade 4 students SDN Ciampel during this time, learners are not active in science learning. Learning is dominated by teachers and passive learners and only listens. This is what seems to make saturated learners and lack of motivation in science learning that impact on their learning outcomes.

Based on the results of the reflection of learning done so far, the results of science learning class IV SDN Ciampel not as expected with still low learning outcomes. This is indicated by the acquisition of learning outcomes of learners on previous subjects who only get MEC more than 55. Only 10 students who achieve more value than MEC. Even if the value of MEC is more than 60, it can be achieved through cycle III.

The low learning outcomes of these learners is caused by the dominance of conventional learning where the learning atmosphere is still centered on the teacher, so that learners become passive in learning. Efforts that can be done to overcome this is a different learning than usual. One effort that researchers do is to conduct cooperative learning. Some of the results of research by other researchers show that cooperative learning is effective enough to improve the relationship between learners of different background and also improve the relationship of teachers and learners in learning. The advantages of cooperative learning include making small groups can work together effectively. Asma (2006) revealed that with cooperative learning, learners learn together, communicate with each other, and be responsible for the achievement of learning outcomes, both individually and in groups.

In this cooperative learning, learning groups that achieve optimal learning outcomes are awarded. The award is not in the form of goods, but in the form of points and other rewards. Asma (2006) revealed that the awarding of this award can spur and motivate learners to construct their learning goals become more structured and better.

Selection of cooperative learning chosen is cooperative learning TGT conducted in the form of CAR activities. This research was conducted at SDN Ciampel. So, this research needs to be done immediately for improvement of learning in class IV, especially science subjects.

METHODS

This research was carried out in the form of CAR which patterned cycle review process. The study was designed in two cycles. If in the first cycle has not been met, then continued in cycle II. Cycle II is done after the analysis of cycle I is done improvements. The stages in each cycle are as follows: planning, action implementation, observation, and reflection (Witarsa, 2017).

Cycle I and Cycle II

Cycle I was carried out based on observations on the initial conditions, consisting of three meetings. Two meetings were held for learning and one meeting for the test. In cycle I covers the following stages:

Planning

At this planning stage, preparations are made before the lesson. The plan is a reference in carrying out the action. At this stage includes the activities of preparing RPP, preparing props to be used, making test instruments, making assessment sheets, and making observation slabs. This planning is done so that the activities of the implementation of research action run effectively, efficiently, and the implementation of the research to be smooth and get optimal results, without any significant constraints.

Implementation of Action

At this stage is the implementation of the contents of the design that has been made at the planning stage. In this stage action is taken. Action is implemented based on the RPP that has been made. The form of this activity is the learning done by the teacher.

Observation

Observation at this stage is done by some other teachers who act as observers. This is done in the hope of obtaining many records and observations based on observations of each observer. These diverse results will be of great benefit to the improvement of the next cycle. The points of focus of observation are as follows: a. Teacher performance in making TGT-based RPP; b. Teacher performance in conducting TGT learning; 3. Learning outcomes of learners of human senses materials with the use of TGT learning; 4. Involvement of learners in learning.

Reflection

Reflection is an activity undertaken to reiterate what has been done. This reflection activity is carried out by the researcher after completion of the implementation of the action and learning to find things that are in accordance with the design of learning and know

carefully about the things that still need improvement in the next cycle. This activity is done at the end of the lesson. Researchers will know to what extent the success of learning is done, and as a consideration for the implementation of the next action.

In this study, researchers used various data collection techniques to obtain data relevant to the research problem. Technique used as follows: a. The first and final test of the learner in cycle I and II. The test used is a matter that must be done by learners to know the ability of individual learners; b. Observation sheet of learners and teachers; c. Documentation.

RESULTS AND DISCUSSION

Based on the results of research from cycle I and cycle II showed that by applying TGT learning science learning results of human senses in grade IV SDN Ciampel academic year 2017/2018 has increased. Results of research that has been obtained from the test of learners and observation of learning is also a task that must be done learners to determine the ability of individual learners. (2) Observation of learning activities of learners and the appearance of teachers. Observation is done by observing the process of learning activities. (3) Documentation includes test results of learners, observation sheet of learners' learning activities and appearance of teachers. Documentation is a way to collect data in the form of written objects (learners' activities and the appearance of teachers) will be put forward as follows:

Learning Outcomes Learners

Learning outcomes are indicated by the value obtained by learners after taking the test. The result of learning science of human sense apparatus on fourth grade students of SDN Ciampel in academic year 2017/2018 after learning cycle I and cycle II can be seen in the following table:

Table 1
Cycle I and Cycle II

Cycle I			Cycle II		
Scor (x)	F	Fx	Scor (x)	F	Fx
100	-	0	100	-	0
95	-	0	95	-	0
90	1	90	90	2	180

Cycle I			Cycle II		
Scor (x)	F	Fx	Scor (x)	F	Fx
85	-	0	85	6	510
80	4	320	80	6	480
75	5	375	75	3	225
70	5	350	70	0	0
65	1	65	65	3	95
60	-	0	60	-	0
55	-	0	55	2	110
50	6	300	0-50	0	0
45	1	45			
0-40	-	0			
Total	23	1195	Total	23	1790

The average value of cycle I = $1195 : 23$
= 51.95

Tbk Cycle I = (Value above 60: Amount
Learners) x 100%
= $(16 : 23) \times 100\%$
= 69.56%

The average value of cycle II = $1790 : 23$
= 77.83

Tbk Cycle II = (Value above 60: Amount
Learners) x 100%
= $(21 : 23) \times 100\%$
= 91.30%

Based on the results of the above table note that the average value of classes in the first cycle is 51.95; while mastery learning classically 69.56% and 30.44% unfinished. The average learning outcomes in cycle II were 77.83; while the classical learning completeness 91.30% and 8.70% unfinished.

Learning Activity Learners

Observation of learners' activities is done collaboratively between researchers and observers. The results of observations on the activities of learners in the cycle I and cycle II can be seen in the following table:

Table 2
Learning Activity Learners
Cycle 1 and cycle II

No	Rated Aspects	Cycle I		Cycle II			
		Percent of Students Activity (%)	Average (%)	Percent of Students Activity (%)		Average (%)	
		M. 1	M. 2	M. 1	M. 2		
1	Activity of learners in paying attention to material explanations from teachers.	66,67	70,83	68,75	76,14	82,95	68,75
2	Activity of learners in answering questions from teachers.	68,75	71,88	70,31	73,86	76,14	70,31
3	Activity of learners in	78,13	82,	80,21	80,68	78,41	80,21

No	Rated Aspects	Cycle I		Cycle II			
		Percent of Students Activity (%)		Percent of Students Activity (%)		Average (%)	
		M. 1	M. 2	M. 1	M. 2		
	group activities.		29				
4	Persistence of learners in examining the results of group tasks.	68,75	73,96	71,35	77,27	89,77	71,35
5	Activity of learners in doing GT.	67,71	70,83	69,27	77,27	79,55	69,27
6	Persistence of learners in completing the task of the teacher.	83,33	87,50	85,41	84,09	79,55	85,41
	Presentasi Aktivitas Belajar Peserta Didik (%)	70,13	76,22	73,19	78,21	81,06	79,65

No	Rated Aspects	Cycle I		Cycle II		
		Percent of Students Activity (%)		Percent of Students Activity (%)		Average (%)
		M. 1	M. 2	M. 1	M. 2	
			5			

Information:

M.1 = Meeting 1

M.2 = Meeting 2

Teacher's Appearance

Observations on teacher performance were performed by observers. The results of observation of teacher performance (in making RPP and Implementation of Learning / PP) in cycle I and cycle II can be seen in table as follows:

Table 3
Recapitulation of Teacher's Ability in Making RPP in Cycle I and Cycle II

No	Rated Aspects	Cycle I		Cycle II	
		Meeting		Meeting	
		1	2	1	2
1	Include basic competencies.	4	4	4	4
2	Develop and organize materials, learning media, and learning resources.	3,0	3,3	3,0	3,6
3	Plan a learning scenario.	3,2	3,6	3,0	3,6
4	Designing classroom	3,0	3,5	3,0	3,5

	management.				
5	Plan procedures, types, and prepare assessment tools.	3,0	3,20	3,0	3,4
6	RPP Systematics	4	4	4	4
RPP Value		3,37	3,60	3,33	3,68
Average		3,49		3,51	
RPP Value Average		87,13		87,67	

Table 4

Recapitulation of Teacher's Ability in Learning Implementation at Cycle I and Cycle II

No	Rated Aspects	Cyle I		Cyle II	
		Meeting		Meeting	
		1	2	1	2
1	Manage the space and learning facilities.	3,5	3,5	4	4
2	Carry out learning activities.	3	3,2	3,3	3,3
3	Manage class interactions.	3,2	3,2	3	3,4
4	Develop a positive attitude of learners to learn.	3,2	3,0	3,4	3,2
5	Demonstrate special abilities in science learning.	3,7	3,0	4,0	3,7
6	Implement evaluation process and learning outcomes.	3,5	3,0	3,5	3,5
7	General impression of teacher performance.	3,7	4,0	4,0	4,0

No	Rated Aspects	Cyle I		Cyle II	
		Meeting		Meeting	
		1	2	1	2
	PP Value	3,5	3,73	3,6	3,76
		8		5	
	Average	3,65		3,70	
	PP Value Average	89,95		92,97	

Table 5
Results of RPP and PP
Cycle I and Cycle II

	No	Rated Aspects	Value	Score	Final Score
Cyle I	1	The ability of teachers in preparing RPP.	87,13	1	87,13
	2	The ability of teachers in implementing learning.	89,95	2	177,08
	Total			3	264,21
	The Value of a Teacher Appearance				88,07
Cyle II	1	The ability of teachers in preparing RPP.	87,67	1	87,67
	2	The ability of teachers in implementing learning.	92,97	2	185,94

	Total	3	271,61
	The Value of a Teacher Appearance		91,20

Cooperative learning TGT is one type or model of cooperative learning that is easy to apply, involving all learners without having differences in status. This type involves the role of learners as peer tutors, containing elements of the game that can excite the spirit of learning and contain reinforcement. Learning activities with games designed in TGT model learning enable learners to learn more relaxed as well as foster responsibility, honesty, cooperation, healthy competition, and involvement in learning. The percentage of students' learning activity in cycle I was only 73.19% (not yet achieved the success indicator of 75%) increased to 79.65% in cycle II. Increased learning activities of learners because of the liveliness and cooperation of learners as learning increases. The increase of learners' learning activities is relevant to Slavin's theory in Mahmuddin (2009), namely the advantages of the TGT model one of which is improving cooperative learners, the completeness of classical learning in the first cycle I was 69.56% (average value 51.95) increased in cycle II to 91.30% (average value 77.83). Increased learning outcomes of these learners because in learning learners pay more attention to explanations of teachers and enterprising in learning. This change in learning outcomes is relevant to Skinner's learning theory in Anni, et al. (2007), which states that learning is a process of behavioral change. As a process, in learning activities it takes time to achieve learning outcomes, and learning outcomes are in the form of a more perfect behavior than the behavior before doing the learning activities. While learning activities according to Gagne in Suprijono (2009) is a change disposition or ability achieved by a person through activity.

In this CAR, teacher performance values are expected to achieve predetermined success indicators (grades > 70). It aims to make the learning can be qualified. The result of teacher's performance in cycle I is 88,07. From the results of reflection on the appearance of teachers, found that there are still shortcomings, including less mastering learning materials and less motivate learners. Looking at the reflection of the results of cycle I, the shortcomings of cycle I improved in cycle II. The performance results in cycle II showed an increase to 91.20. Teachers are the primary educational tool in determining the quality of education, because teachers directly confront the learners in classroom and outside classroom learning. In the hands of the teacher the quality of the child's personality is formed. Therefore, teachers must be competent, responsible, skilled, and dedicated. This is relevant to the theory of

teacher competence, where teachers should have four competencies, namely: personal, social, professional, and pedagogic competencies. TGT learning is said to be successful when the activities and learning outcomes, as well as the appearance of teachers have reached predetermined success indicators. Based on the results achieved during the TGT cooperative learning, learners have improved both in terms of motivation, enthusiasm, cognitive aspects, and affective aspects. In each cycle also increased activity, learning outcomes, and appearance of teachers.

CONCLUSION

Based on the results of CAR that has been done, it can be concluded that the application of science learning with TGT model implemented can improve student learning outcomes are characterized by the increase of the average class from 51.95 with low criteria in the first cycle to 77.83 with the criteria being on cycle II. The TGT model can also increase the average grade value from 51,95 with 69,65% learners complete learn in cycle I to 77,83 with learners learn 91,30% in cycle II. The TGT model can also increase the percentage of teachers' performance from 88.07% in cycle I to 91.20% in cycle II.

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REFERENCES

- Alibaba E., H., & Ozer, B. (2013). "Identifying Professional Teaching Standars using Rasch Model Analysis: The Case of Northern Cyprus". *Eurasian Journal of Educational Research* (53), 175 – 196.

- Asma, N. (2006). *Model Pembelajaran Kooperatif*. Jakarta: DEPDIKNAS DIRJENDIKTI Direktorat Ketenagaan.
- Barney, D., Deutsch, J. (2012). "Attitudes and Perceptions of Elementary Classroom Teachers Use of Physical Education Time for Planning". *International Electronic Journal of Elementary Education* 4(2), 367 – 376.
- Burns, M., Pierson, E., Reddy, S. (2014). "Working Together: How Teachers Teach and Students Learn in Collaborative Learning Environments". *International Journal of Instruction* 7 (1), 18 – 32.
- Choy Chee, S., dan Oo San P. (2012). "Reflective Thinking and Teaching Practices: A Precursor for Incorporating Critical Thinking Into The Classroom?". *International Journal of Instruction* 5 (1), 167 – 182.
- Depdiknas. (2003). *Pendekatan Kontekstual (Contextual Teaching and Learning)*. Jakarta: Depdiknas Dirjen Dikdasmen.
- Fat'hi, J., Behzadpour, F. (2011). "Beyond Method: The Rise of Reflective Teaching". *International Journal of English Linguistics* 1(2). 241-262.
- Goker, S., D. (2016). "Use of Reflective Journals in Development of Teachers' Leadership and Teaching Skills". *Universal Journal of Educational Research* 4(12A).63-70.
- Kadioglu, C. & Uzuntiryaki-Kondakci, E. (2014). "Relationship Between Learning Strategis and Goal Orientations: A Multilevel Analysis". *Eurasian Journal of Educational Research* (56), 1 – 22.
- Lalor, J., Lorenzi, F., dan Rami, J. (2015). "Developing Professional Competence through Assessment: Constructivist and Reflective Practice in Teacher-Training". *Eurasian Journal of Educational Research* (55), 45 – 66.

- Mahmuddin. (2009). *Strategi Pembelajaran Kooperatif Tipe Teams Games-Tournament (TGT)*. (Tesis). Tidak Diterbitkan.
- Panigrahi, R., M. (2014). "School Effectiveness at Primary Level of Education in Relation to Classroom Teaching". *International Journal of Instruction* 7(2), 51– 64.
- Suprijono, A. (2009). *Cooperative Learning Teori dan Aplikasi PAIKEM*. Yogyakarta: Pustaka Pelajar
- Unal, Z., Unal, A. (2012). "The Impact of Years of Teaching Experience on The Classroom Management Approaches of Elementary School Teachers". *International Journal of Instruction* 5 (2), 41 – 60.
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional.
- Uygun, M., & Kunt, H. (2014). "An Analysis of the Relationship between Prospective Teachers' Thinking Styles and their Attitudes to Teaching Profession According to Various Variables". *International Electronic Journal of Elementary Education* 6(2), 357 – 370.
- Uysal, H., Burcak, F., Tepetas, S.,G., Akman, B. (2014). "Preschool Education and Primary School Pre-service Teachers' Perceptions about Classroom Management: A Metaphorical Analysis". *International Journal of Instruction* 7(2), 165 – 180.
- Witarsa, R. (2017). *Pembekalan Kompetensi Guru Berbasis Reflective Teaching untuk Memfasilitasi Keterampilan Berpikir Kreatif Guru Sekolah Dasar*. (Disertasi). Sekolah Pascasarjana, Universitas Pendidikan Indonesia.