THE APPLICATION OF TEAMS-GAMES-TOURNAMENT (TGT) TO INCREASE STUDENTS' ACTIVENESS AND LEARNING OUTCOMES

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Abstract. This study was aimed at improving the activeness and learning outcomes of 5th grade students of SDN Jetak 03 Getasan District of Semarang Regency with the application of Teams-Games-Tournament (TGT) model. This study was applied to 5th graders with 18 students as subject and using spiral model from C. Kemmis & Mc Taggart in 2 cycles. Data collection techniques used was test and non-test techniques. Results show that there was an increase from cycle I and cycle II, in both students' activeness and student learning outcomes. Therefore, TGT model can be used to increase students' activeness and learning outcomes.

Keywords: Teams-Games-Tournament, activeness, learning outcomes

Natural Science (NS) deals with how to explore knowledge of nature in sequence and coherence, thus science does not only talk about facts, concepts, and principles but rather talks about a discovery related to the universe. Wisudawati and Sulistyowati (2014) argue that NS learn about natural phenomena that actually occur, both in reality and the actual events. NS is a science related to everyday human life that must be studied human so that human can fully comprehend about natural phenomenon that arises along with problems to be solved in everyday life related to nature.

The above NS exposure shows that science learning is important to be taught in schools, especially elementary schools, because to introduce children about the universe so that children can understand the nature around them and the circumstances surrounding it. According to Riyadi (2016) towards the formation of student characters about a living environment, strongly influenced by the concepts of knowledge and life of nature. So in science subjects in elementary school aims to introduce students to understand about themselves and the natural environment. Meanwhile, according to Hasanah (2016), natural science learning requires students to be active, able to work in groups and have a great curiosity. Judging from the objectives and essence of science education, the learning should be able to prepare, build and form the ability of students to master the knowledge, attitudes, values, and basic skills needed for life in society. From some of the above opinion can be interpreted that science education is needed in elementary school. This is in line with the opinion of Taonah (2016) which states that science education aims to learners can recognize and utilize nature because it is very important for the life of learners.

In a learning process there must be students' activeness at the beginning of the learning process lasted until completion and student learning outcomes after attending the lesson. According to Dimyati and Mudjiono (2013) in every elementary school there must be students with different characters which then highlighted during the learning process, whether in the form of physical activity or psychic activity. According to research from Fauziah (2016) if the learning outcomes studied in this research is the cognitive domain, then the cognitive domain can be known through test. In this study the cognitive domain measured includes knowledge level (C1), understanding (C2), and application (C3). Meanwhile, according to Hasim (2016) optimal learning quality can be reflected from the involvement of students actively in the learning process. The involvement in question is student-centered learning and the role of the teacher only as a motivator and facilitator.

Further learning outcomes according to Suprijono (2009) is a student achievement that is realized with the numbers that then become the value obtained by students. Thus it can be interpreted that the learning activity can be related to student learning outcomes at school.

Student activity can cause the decrease of a subject that will impact on a student learning outcomes. In this case agree with Wisudawati and Sulistyowati (2014) which states science education in Indonesia is low in terms of learning outcomes, this can occur due to several factors. One of the most important factors is the learning environment of learners in the form of strategies created by teachers to optimize the potential of students. To be able to build an active learning environment and fun, it can be started by providing motivation to students, then teachers can use learning models tailored to the material. According to Widaswara (2014) in accordance with the demand of curriculum KTSP, that the potential and ability of all students to learn and achievement is important to note. There are several ways that can be developed to motivate students in learning them by using cooperative learning model.

According to Devi (2016), learning models that can be applied are inquiry, quantum, PBL, CTL, STAD, TGT, NHT and so on. One of the fun and exciting things for kids in elementary school is game. One of the models that can be applied in science learning is to use the Teams-Games-Tournament (TGT) model. Slavin (2005) stated that this learning model is almost the same as STAD learning model, by replacing the quiz with weekly tournaments, and students collect score to be a winner in the tournament. Therefore, students will be more enthusiastic and active during the lesson. According to Cahyadi (2005) the TGT learning model will be able to strengthen the students' memory of the material they learn, because the academic games experienced by students in the tournament serves as a review to solidify students' understanding of the learning materials they have learned before the students take the individual test.

Huda (2014) pointed that the first of the TGT procedures is delivering the study materials as a whole, and then the students formed the group heterogeneously to work on the worksheet. The second tournament, students start the tournament with the teacher divide the students into homogeneous groups by paying attention to student rankings. Then the students represent the group forward for the tournament, and then the students take the numbered cards containing the questions and answers. Each student taking a student card must answer the existing question and if it is wrong it will be thrown on another group that can answer, then the previous student will lose the score. However, if all group representatives cannot answer, the card cannot be used. The third scoring, which is the calculation of group scores together. The group with the most score will get the reward. Likert scale can be used to measure the (Wardani et al., 2012). The answer of each instrument item using the Likert scale in the form of this questionnaire has a level from very positive to very negative, which can be words such as: Very Important (VI), Important (I), Unimportant (UI), Very Unimportant (VU) or (1) strongly agree, (2) agree, (3) disagree, (4) strongly disagree. Likert scale can be made using some classification.

Based on the observation in the 5th grade at SDN Jetak 03, the teacher has taught the material in accordance with predefined process standard and has delivered the material as a whole well, but the students tend to be silent or even actively excessive such as talking themselves while learning takes place and less enthusiastic, shame to ask or express opinions, so that students in the learning process does not respond to what has been delivered by teachers and factors students who are lazy at home to learn or no encouragement from parents for their children to learn at home, thus affecting the value of science subjects that below KKM which is less than 70.

In accordance with the observation conditions of student activeness and student learning outcomes above, it is necessary to hold class actions to improve the classroom become active and fun. The implementation of TGT model is expected by teacher to increase activity and result of student learning because from some of the researchers who have used TGT model show increase of value obtained by student. Research conducted by Metaliana (2016) at SDN 1 Bitera showed improvement of student learning activity which was conducted in two cycles that is from 76.11% to 83.61%, so that experienced increase of equal to 7.5%. While for the student learning

outcomes in cycle 1 shows the number 72.33% and increased in cycle 2 of 82.33%. Based on the result, the researchers are interested to use Teams-Games-Tournament (TGT) Model to increase students' activeness and learning outcomes.

METHODS

The type of research conducted is Classroom Action Research using the spiral model Kemmis and Mc Taggart which includes planning, implementation or observation, and reflection. This research was conducted in SDN Jetak 03 District Getasan with the subject of the research is class 5 which amounted to 18 students consisting of 7 male students and 11 female students. The study used two variables, namely independent variables and dependent variables. The independent variable used in this research is Teams-Games-Tournament (TGT learning model) while the dependent variable is students' activeness and student learning outcomes in science subjects. The operational definition used in this study is Teams-Games-Tournament model (TGT) is a tournament-based learning model. Then the students' activeness is an activity of interaction between teacher and student. The last is the result of student learning is a student's ability after following the learning measured by numbers.

The data was collected using test and non-test technique. Test technique is a means of collecting data that is quantitative. The test technique is given to the students in the form of multiple choices to measure students' ability after the learning is done with TGT model. While non-test techniques consist of interviews and observation. Interviews were conducted to 5th grade teachers to obtain information about students' activeness during class and their individual characters. While observation is done to observe the implementation of learning action by using TGT model and observing student activeness during learning process of teaching. In observation of student activeness besides doing observation, student is required to fill in questionnaire at the end of every cycle.

This research is said to be successful if the learning procedure can be executed in a coherent and correct so that students can be active when the lesson is then realized in the form of satisfactory learning results with KKM 70. Data analysis techniques used in this research is quantitative and qualitative descriptive techniques. Qualitative data were obtained based on the result of teacher and student observation sheet in the form of explanation or description and filling of attitude scale in the form of Likert scale by students, while the data obtained from test result in the form of numbers is quantitative data. Then the qualitative and quantitative data were analyzed by using comparative descriptive analysis by comparing the condition between cycle I and cycle II. With the comparison will be improved learning quality and student learning outcomes.

RESULTS AND DISCUSSION

In the implementation of this research conducted at SDN Jetak 03 Getasan district Semarang Regency in grade 5 with the number of students 18. The implementation of the research consisted of 2 cycles, namely cycle 1 and cycle 2. In the initial conditions before the actions, students' activation was disrupted, there were silent students, there were students who underestimate the teacher, and there was an excessive activity that affects the daily test score of 8 students who reach the KKM during daily test.

Table 1 described that the results of student learning before the action on the science subjects found there are 2 students are at the interval 50 - 54 (11.1%), 3 students are at intervals 55 - 59 (16.7%), 2 students are at intervals of 60 - 64 (11.1%), 3 students are at intervals 65 - 69 (16.7%), 4 students are at intervals of 70 - 74 (22.2%), 3 students are at intervals 75 - 79 (16.7%), and 1 student is in interval 80 - 84 (5.5%). The student's highest score is 80, while the lowest score is 50.

Table 1. Frequency distribution of Natural Science Learning daily test before the action.

No	Interval	Frequency	Percentage (%)
1	80 – 84	1	5.5
2	75 – 79	3	16.7
3	70 – 74	4	22.2
4	65 – 69	3	16.7
5	60 – 64	2	11.1
6	55 – 59	3	16.7
7	50 – 54	2	11.1
Total		18	100

In addition to data frequency of daily test results above, there is data of students' learning mastery (Table 2). While on the first cycle of student activeness can be seen which is proved with measurement by using the Likert scale that students filled after the third meeting on cycle I (Table 3).

Table 3 described the students' learning activity on science subjects is at intervals ≤ 62 categories Very Poor (VP) there are 0 students or no students, 2 students are at intervals 63 - 65 (11.1%) under category Poor (P), 4 students are at intervals 66 - 68 (22.2%) with adequate category (A), 5 students are in interval 69 - 71 (27.8%) Good (G), and 7 students are in interval ≥ 72 (38.9%) with Very Good category (VG). The highest score was 74, mean 70.2, and the lowest score was 64.

The next is student learning outcomes in cycle I begins with the teacher to give pretest questions to determine the initial ability of students. Based on Table 4 it can be explained that the pretest result of grade 5 students in science subjects obtained 3 students are at interval < 40 (16.7%), then 1 student is at interval 40 – 49 (5.6%), then 4 student reside at intervals of 50 – 59 (22.2%), next 5 students are at intervals of 60 – 69 (27.7%), 3 students are at intervals of 70 – 79 (16.7%), and 2 students are at intervals of 80 - 89 (11.1%). The highest score achieved by students is 80, while the lowest score of students is 20. Thus, the students' learning outcomes that have been analyzed in fact show the results are less satisfactory because there are still some students who have not reached learning mastery.

Table 2. Distribution of Students' Completed Learning Before Action

No	Completeness	Total	Percentage
1	Complete	8	44.4
2	Incomplete	10	55.6
Average		65.16	
Maximal Score		80	
Minimum Score		50	

Table 3. Frequency distribution of students' activeness in cycle I

No	Interval	Frequency	Category	Percentage (%)
1	≥ 72	7	VG	38.9
2	69 – 71	5	G	27.8
3	66 – 68	4	A	22.2
4	63 – 65	2	P	11.1
5	≤ 62	0	VP	0
Total		18		100
Minimum Score = 64				
Maximal Score = 74				
Average = 70.2				

VG (very good); G (good); A (average); P (poor); VP (very poor)

Table 4. Frequency Distribution of Pretest in Cycle 1

No	Interval	Frequency	Percentage (%)
1	80 – 89	2	11.1
2	70 – 79	3	16.7
3	60 – 69	5	27.7
4	50 – 59	4	22.2
5	40 – 49	1	5.6
6	< 40	3	16.7
Total		18	100

Table 5. Frequency Distribution of Posttest in Cycle 1

No	Interval	Frequency	Percentage (%)
1	90 – 99	5	27.7
2	80 – 89	6	33.3
3	70 – 79	3	16.7
4	60 – 69	1	5.6
5	50 – 59	2	11.1
6	40 – 49	1	5.6
Total		18	100

Tabel6. Learning Mastery DistributionPostest Cycle I

No	Complete	Total	Percentage (%)
1	Complete	14	77.7
2	Incomplete	4	22. 3
Average		76,6	
Maximal score		95	
Minimum score		40	

Table 5 described the posttest result done by the 5th grade students in the science subjects obtained by 1 students are in the interval 40 - 49 (5.6%), 2 students are in interval 50 - 59 (11.1%), 1 student is at intervals of 60 - 69 (5.6%), 3 students are at intervals of 70 - 79 (16.7%), 6 students are at intervals of 80 - 89 (33.3%), and 5 students are at intervals of 90 - 99 (27.7%). The highest score obtained by students is 95, while the student's lowest score is 40. Data result of students' learning mastery shows that 77.7% of student have completed in studying. Thus it can be said that the cycle I activity and student learning outcomes have increased the student activeness reached >72 (Very Good) with the number of students 7. And the completeness of student learning that has reached KKM there are 14 students. But in the implementation of cycle I there are still shortcomings as there are still students who have not been active in learning, students often joking with friends when learning has begun, while discussing there are the students who disturbing other groups and not doing group work. In this case the need for follow-up to improve on the implementation of cycle II for better implementation than cycle I for the results of 5th grade students of SDN Jetak 03 to be better. Furthermore, the implementation of the second cycle is the same as in cycle I that is preceded by giving pretest to know the initial ability of students before the lesson begins and the posttest implementation at the end of the meeting accompanied by filling questionnaire about activeness.

Based on Table 7, it is found that in the implementation of cycle II, it is found that the activity data of students with 1 student is at interval ≤ 76 (5.6%) Very Poor (VP) category, 1 student is in interval 77 - 81 (5.6%) with Poor (P) category, 2 students are in the interval 82 - 86 (11.1%) with Adequate (A) category, 4 students are in interval 87 – 91 (22.2%) Good (G) category, and 10 students are on interval ≥ 72 (55.5%) with Very Good (VB) category. The highest score is 93, the average of 89.2 and the lowest score is 75. From the data

above it is seen that the activity of students is increasing from cycle I to Cycle II.

Then from Table 8, it can be seen that the pretest result of the 5th grade students in the science subjects obtained 5 students is at interval 55 - 59 (27.7%), 1 student are in interval 60 - 64 (5.6%), 4 student are at interval 65 - 69 (22.2%), 2 students are at intervals 70 - 74 (11.1%), 3 students are in interval of 75 - 79 (16.7%), 2 students are in interval 80 - 84 (11.1%), and 1 student were at intervals 85 - 89 (5.6%). The highest score obtained by students is 85, while the lowest score obtained by students is 55.

Based on Table 9, it can be presented posttest result on 5th grade students of science subjects obtained 2 students are at interval 50 - 59 (11.%), at intervals 60-69 many students have 0 (0%), 5 students at interval 70 - 79 (27.8%), 4 students are at intervals of 80 - 89 (22.2%), and 7 students are at intervals of 90 - 100 (38.9%). The highest score is 100 students and the lowest score is 50. In addition to the posttest result frequency data of the students, there is also the result data of students' learning mastery.

The implementation in cycle II by using Teams-Games-Tournament (TGT model) in 5th grade students of SDN Jetak 03 as a whole has been running well and can overcome some problems that exist in cycle I. By applying model Teams-Games-Tournament (TGT) The atmosphere of active learning activities of students in positive things such as participate in discussions, express opinions, dare to answer questions and other teachers.

Table 7. Frequency Distribution of Activeness Cycle II

No	Interval	Frequency	Category	Percentage (%)
1	$\geq$ 92	10	VG	55.5
2	87 – 91	4	G	22.2
3	82 – 86	2	A	11.1
4	77 – 81	1	P	5.6
5	$\leq$ 76	1	VP	5.6
Total		18		100
Minimal Score = 75				
Maximal Score = 93				
Rerata = 89,2				

VG (very good); G (good); A (average); P (poor); VP (very poor)

Table 8. Frequency Distribution of Pretest Result Cylce II

No	Interval	Frequency	Percentage (%)
1	85 – 89	1	5.6
2	80 – 84	2	11.1
3	75 – 79	3	16.7
4	70 – 74	2	11.1
5	65 – 69	4	22.2
6	60 – 64	1	5.6
7	55 – 59	5	27.7
Total		18	100

Tabel9. DistribusiFrequencyHasil Posttest Siklus II

No	Interval	Frequency	Percentage (%)
1	90 – 100	7	38.9
2	80 – 89	4	22.2
3	70 – 79	5	27.8
4	60 – 69	0	0
5	50 – 59	2	11.1
Total		18	100

Table 10. Learning Mastery Distribution Posttest Cycle II

No	Completeness	Total	Percentage (%)
1	Complete	16	88.9
2	Incomplete	2	11.1
Average		80.27	
Maximal Score		100	
Minimum Score		50	

Overall, there is an increase in students' activity in the learning process on science subjects with questionnaires, proved in the implementation of cycle I there are 7 students whose activity is at interval ≥ 72 with classification Very Good (VG) and on the implementation of cycle II student activeness increased to 10 students at intervals ≥ 92 with very good classification (VG) and interval class from cycle I to cycle II also increased for category determination (Table 11). The increase in category creation is determined by calculating the intervals obtained from the highest and lowest scores of each cycle, then calculating the difference. The distance of the interval class is determined from the highest and lowest score of the student questionnaire, if the lowest score indicates a higher number then the higher the interval class.

Table 11.Summary of Students' Activeness in Cycle 1 and Cycle 2

Cycle 1			Cycle II		
Category	Interval	Total Students	Category	Interval	Total Students
Very Good (VG)	≥ 72	7	Very Good (VG)	≥ 92	10
Good (G)	69 – 71	5	Good (G)	87 – 91	4
Adequate (A)	66 – 68	4	Adequate (A)	82 – 86	2
Poor (P)	63 – 65	2	Poor (P)	77 – 81	1
Very Poor (P)	≤ 62	0	Very Poor (P)	≤ 76	1
Total Students		17			17

Compared to the completeness of IPA learning results, it can be seen an increasing number of students who reach KKM in science subjects (Table 12). Proven on the initial condition there are still many students who have not reached mastery learning. However, after the action of cycle I the number of students who have reached the KKM as many as 14 students as evidenced by the results of posttest. Continued on the second cycle also has increased learning mastery with the number of students 16 who have reached KKM. Thus the learning done proved to improve student learning outcomes.

Table 12. Summary Comparison of Science Learning Mastery on Initial Condition, Cycle I Posttest and Cycle 2 Posttest

No	Score	Initial Condition		Cycle 1		Cycle 2	
				Posttest		Posttest	
		F	Percentage (%)	F	Percentage (%)	F	Percentage (%)
1	Complete	8	44.4%	14	77.7%	16	88.9%
2	Incomplete	10	55.6%	4	22.3%	2	11.1%
	Total	18	100%	18	100%	18	100%

In the observation of the initial condition before the action in the class 5 SDN Jetak 03 has some problems or shortcomings during the learning process is the lack of level of students' understanding of the learning material that is evidenced in the results of daily repetition of students who still have students who have not reached the Minimum Criterion Exhaustiveness (KKM ≥70). This condition is caused by various factors such as student factors whose activities are disrupted by not paying attention to the teacher when the material is described and not enthusiastic in following the learning.

Based on the problems mentioned above, it is necessary to apply the model Teams-Games-Tournament (TGT) which aims to improve students' activity and learning outcomes. Data obtained from the implementation of cycle I there are 7 students whose activities are at intervals ≥ 72 with the classification Very Good (B) and on the implementation of the cycle II student activity increased to 10 students who are at intervals ≥ 92 with classification Very Good (SB) and class The interval from cycle I to cycle II also increased for category determination. Improvement of learning outcomes begins at initial conditions up to cycle II. In the initial condition to the first cycle there is an increase from 44.4% to 77.7% with the number of students who have reached completeness as many as 14 students. Furthermore, from cycle I to cycle II an increase from 77.7% to 89% with the number of 16 students who have reached completeness. Thus through the model Teams-Games-Tournament (TGT) can improve the activity and learning outcomes of students because in the learning process all students are required to participate in the tournament.

CONCLUSION

The application of Teams-Games-Tournament (TGT model in the 5th grade science class of SDN Jetak 03 is proven to increase the students' activity and learning outcomes. This can be evidenced from the activeness and student learning outcomes derived from the initial conditions, cycle I, until the second cycle that has increased. Data obtained from the implementation of cycle I there are 7 students whose activities are at intervals ≥ 72 with the classification Very Good (SB) and on the implementation of the cycle II student activity increased to 10 students who are at intervals ≥ 92 with classification Very Good (SB).

The improvement of learning outcomes appears in the initial conditions of 18 students there are 8 students who have achieved mastery learning with percentage 44.4% and students who have not completed 10 students with a percentage of 55.6%. In the first cycle there are 14 of 18 students have reached KKM that has been set (≥70) with 77.7% percentage and students who have not reached completeness there are 4 students with the percentage of 22.3%. Next on cycle II of 18 students there are 16 students who have reached or even exceeded the KKM with percentage 88.9% and students who have not completed there are 2 students with a percentage of 11.1%.

REFERENCES

Aristika, Widaswara. 2014. Meningkatkan Hasil Belajar Siswa Materi Sumber Daya Alam dan Penggunaannya Melalui Model Pembelajaran Kooperatif Tipe Teams Games Tournament (TGT) Kelas V SDN Karang Taruna 1 Kecamatan Pelaihari Kabupaten Tanah Laut. *Jurnal Paradigma*. 9 (1). 70-71.

Cahyadi, Mei. 2016. Penerapan Model TGT Meningkatkan Penguasaan Kompetensi IPA Siswa Kelas VB SD Negeri 8 Pemecutan. *Jurnal Mimbar PGSD*. 4 (1). 7-9.

Dimyati, Mudjiono. 2013. *Belajar & Pembelajaran.* Jakarta: PT Rineka Cipta.

Fauziah, Resti. 2016. Penerapan Model Pembelajaran TGT (Teams Games Tournament) untuk Meningkatkan Hasil Belajar Siswa pada Materi Sumber Daya Alam di Kelas III SD Negeri 70 Kuta Raja Banda Aceh. *Jurnal Tunas Bangsa*. 3(1). 62-63.

Hasanah, Wiwid. 2016. Peningkatan Aktivitas dan Hasil Belajar Menggunakan Model Kooperatif Teams Games

Tournament (TGT) Pada Konsep Pesawat Sederhana. *Jurnal PGSD Kampus Cibiru*. 4(3). 6-9.

Hasim, Muhammad. 2016. Penerapan Model Pembelajaran Tgt Berbantuan Media Gambar Seri Untuk Meningkantkan Keaktifan dan Hasil Belajar IPA. *Jurnal Mimbar PGSD*. 6(3). 8-11.

Huda, Miftahul. 2013. *Model - Model Pengajaran Dan Pembelajaran.* Yogyakarta: Pustaka Pelajar.

Metalia, Puput Hanggarwati. 2016. Penerapan Model Pembelajaran TGT Dengan Berbantuan Media Gambar Untuk Meningkatkan Keaktifan dan Hasil Belajar IPA Kelas V. *Jurnal Mimbar PGSD*. 6(3). 9-10.

Radha Devi, Lishvari. 2016. Penerapan Pendekatan Saintifik Berbasis Pembelajaran Kooperatif Tipe TGT Untuk Meningkatkan Penguasaan Kompetensi Pengetahuan IPA. *Jurnal Mimbar PGSD*. 4(1). 5-7.

Republik Indonesia, 2006. *Peraturan Menteri Pendidikan Nasional (Permendiknas) No. 22*. Jakarta : Sekretariat Negara.

Slamet Riyadi, Bambang. 2016. Upaya Meningkatkan Hasil Belajar Siswa Menggunakan Metode Teams Games Tournament (TGT) Pada Pembelajaran Ipa Tentang Struktur Tubuh Manusia dan Fungsinya bagi Siswa Kelas IV SD Negeri 1 Lumbir Tahun Pelajaran 2015/2016. J*urnal Academy of Education*. 1(3) 16-17.

Slavin. 2005. *Cooperatif Learning.* Bandung: Penerbit Nusa Media.

Sulistya Wardani, Naniek, dkk. 2012. *Asesmen Pembelajaran SD.* Salatiga: Widya Sari Press.

Suprijono, Agus. 2009. *Cooperative Learning.* Yogyakarta: Pustaka Pelajar.

Taonah. 2016. Upaya Meningkatkan Motivasi dan Hasil Belajar Siswa Kelas IV dalam Pembelajaran IPA Tentang Struktur dan Fungsi Bagian Tumbuhan Melalui Metode *Numbered Heads Together* (NHT) di SD Negeri 3 Purwojati Tahun Pelajaran 2015/2016. J*urnal Academy of Education*. 1(3) 113.

Wisudawati, Sulistyowati. 2014. *Metodologi Pembelajaran IPA.* Jakarta: PT Bumi Aksara.