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The Implementation of Stad and TGT Learning Models to Improve Students'Learning Motivation and Learning Outcomes (A Study on the Eleventh-grade Students of SMKN 1 Sooko Mojokerto)

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Abstract
This research aims to implement the learning model of STAD and TGT with the expectation to improve motivation and student learning outcomes in Finance Accounting subjects class XI AK-3 SMK Negeri 1 Sooko Mojokerto, and to know the constraints. The Research was a Classroom Action Research (CAR), with the implementation of two cycles and each cycle 4 meeting. Data were collected by observation, interview guides, field papers, document and test of learning result. It also used student motivation questionnaire technique in STAD and TGT.The results showed that the teaching and learning process with the implementation of STAD and TGT model was very good because the motivation and student learning outcomes can increase in cycle I with high criteria and cycle II with very high criteria. After STAD and TGT treatment, the average score of students also increased in cycle I with high criteria and cycle II with very high criteria. As for the classical after the implementation of STAD and TGT model, all students passed the subject because they got standard minimum score.
Keywords: Student Teams Achievement Divisions (STAD) and Teams Games Tournament (TGT), learning motivation,learning outcomes, cooperative learning

INTRODUCTION

Finance Accounting is one of the subjects of the finance expertise program, which is included in the areas of business and management expertise. While Financial Accounting subjects are considered difficult for students. To overcome the difficulties of these students, the role of teachers is needed in the learning process so that in the transferring process of knowledge, understanding, and skills of students implemented effectively and efficiently. Accounting subjects are one of the productive components that aim to enhancement students facing the world of work that suitable with their expertise programs.

The observations that conducted at SMK Negeri 1 Sooko Mojokerto showed that the students learning outcomes in Accounting class XI AK-3 (the eleventh-grade students of accounting) is still low. Based on the interview with Mrs. Susiati, one of the Accounting teachers concluded that the ability of students class XI AK-3 in the mastery of Accounting material taught by the teacher not yet optimal. It can beseenby the number of students who are unable to reach Minimal Completeness Criteria on the results of the daily test in the academic year 2017/2018. The value of the Minimal Completeness Criteria in the productive subjects of Accounting is 75.While data from the average value of daily re-examination of students class XI AK-3, only 7 from 31 students who are able to achieve the value of Minimal Completeness Criteria, while 24 students or approximately 77.42% must follow remedial teaching program. Beside that the teaching methods applied by Accounting teachers in SMK generally using conventional method. Teachers are considered the source of knowledge and have a central role in teaching class activities. While students should sitting, listening, paying attention to some examples of accounting and doing tasks continuously. It makes students always complain and reluctant to do the task, so in the evaluation,many students got a low score and can not do their assignmentappropriatetime.

Based on the above explanation, the Researcher doing this research by implementation through models in Cooperative Learning type STAD (Student Teams Achievement Division) and TGT (Teams Games Tournament) on Finance Accounting subject. With the learning model of Cooperative Learning, students are required to be active in play activities while learning in the classroom, do not feel bored quickly so that students are motivated to follow the process of learning Accounting and is expected to improve learning outcomes.Next Mc. Donald in Hamalik (2014: 106) explains that the motivation is a change of energy in a person characterized by the emergence of feelings and reactions to achieve goals. According toSudjana (2005: 20), the nature of learning outcomes is a change in individual behaviour that includes cognitive, affective, and psychomotor aspects.

This research aims (1) to know the application of STAD and TGT learning model, (2) to know student learning motivation after applying STAD and TGT learning model, (3) to know learning result after applying STAD and TGT learning model, (4) to know the problem faced in the implementation of STAD and TGT learning models to the students of class XI AK-3 SMK Negeri 1 Sooko Mojokerto on Bank's cash accounting material and Bank reconciliation.

METHOD

This study is a classroom action research. Teachers can examine themselves on the teaching practices that doing in the classroom, viewing students from their interaction aspects in the teaching process, improve teaching practices become more qualified and effective. The main purpose of CAR to solve real problems that occur in the classroom and increase the real activities of teachers in their professional development activities, Kunandar (2013: 45).

The researcher acts as a teacher who makes the design of learning, conveying teaching materials during the learning process takes place, compile questions, compile observation sheets and questionnaires, data collectors, data analyzers as well as reporting research results.Because of the researcher as a teacher at SMKN 1 Sooko Mojokerto regency, so that the process of flexible data taking can be doneanytime.So the conclusion of the researcher's assignment as a provider of action and also as a research instrument also creates action plans (making test instruments and creating learning scenarios), Collecting data includes observing learning activities, Analyzing and managing data and concluding and reporting research results. In the implementation of Classroom Action Research (CAR) researcher as a teacher of accounting subjects in collaboration with colleagues who will act as an observer. This research was conducted at SMK Negeri 1 Sooko Mojokerto class XI Program of Accounting academic year 2017/2018 with the amount of 31 students consisting of 1 male student and 30 female students.

Types of data used in this study are qualitative data consisting of (1) Data on observation results as the material of analysis to the accuracy of teachers in applying STAD learning model with TGT and also to know the level of success of the application of the learning model, (2) Data of interview result to know the supporting factor and obstacle of application of STAD learning model with TGT, (3) Data of field note result which is complement of observation activity. Besides qualitative data also quantitative data, which consists of the scores or formative test results are pre-test and post-test on cycles 1 and 2 to determine the increase in student learning outcomes achieved. The primary data sources include students & teachers as well as secondary data such as school documents. In this research data obtained through several ways are test, interview, observation, questionnaire, field notes, and documentation.

Data analysis was done every cycle at the end of the teaching process. Data analysis in this study was done by reviewing all data that has been obtained that was descriptive analysis. The collected research data consist of observation result, motivation study analysis, learning result analysis and evaluation of the success of action per cycle. During the process of data collection then processed and reported and analyzed then drawn a conclusion. The steps in analyzing the data are by reducing data, presenting the data, and drawing conclusions.

The classroom action research cycle developed by Kemmis and Mc Taggart. (Hopkins, 2011: 92) each cycle consists of the planning, implementing, observation, and reflection phases. While cycle II of each stage is the same as the cycle I, for cycle II is implemented to fix the deficiencies that occur in cycle I.

As for the syntax of learning models STAD and TGT as follows:

Table 1 The procedure of STAD and TGT learning models

STAD	TGT
1. The teacher creates and provides pre-test questions to all students 2. The teacher presents the material in outline 3. Each group (consisting of 4-5 heterogeneous members) discusses the material contained in the worksheet 4. Student match worksheet with answer key 5. Students take individual quizzes (doing post-test questions) 6. The teacher creates table work to calculate pre-test score, post-test and obtained score. 7. Teachers give a reward to the winning group.	1. The teacher divides the students into groups of 4-5 heterogeneous students 2. 2. In the tournament table, students are grouped according to their ability level (clever contrary clever, less clever contrary less clever) 3. Students sit on the table of tournaments guided by jury and assistant 4. Implement the tournament 5. Scoring.

RESULTS AND DISCUSSION

1. The Implementation of STAD and TGT Learning Models

According to Slavin (2005), Student Teams Achievement Divisions (STAD) and Teams Games Tournament (TGT) learning models are the oldest and most studied models of learning in the Cooperative Learning. Both use a cooperative approach. The STAD learning model uses individual quizzes at the end of the lesson, while TGT

uses academic games.

Based on the implementation that has been done with the learning model of STAD and TGT, the result of observation cycle I and cycles II can see in table 2.

Table 2 Observation Results of the Implementation of Learning Model STAD in Cycles I and II

No	Observer' name	Cycle I		Cycle II	
		%	Criteria	%	Criteria
1	Susiati	80	good	92	Very good
2	Heny P	78	good	88	Very good
3	Ismartini	76	good	90	Very good
4	Average Total	78	good	90	Very good

Based on table 2 shows that the observation results of the implementation of STAD learning model in the first cycle of 78% and in the second cycle of 90%. Researchers can conclude that there is an increase in the percentage of success of the action on the implementation of Learning Model STAD Cycle I to Cycle II on subjects of Financial Accounting

While below is a recapitulation table of observation results of the implementation of learning models TGT cycles I and II.

Table 3 Observation Results of the Implementation of Learning Model of TGT in Cycles I and II

No	Observer' name	Cycle I		Cycle II	
		%	Criteria	%	Criteria
1	Susiati	84	Very good	96	Very good
2	Heny P	78	good	94	Very good
3	Ismartini	80	good	96	Very good
4	Average Total	81	good	95	Very good

Similarly, in table 3 there is an increase in the percentage of successful actions on the implementation of the TGT learning model in the first cycle of 81 % and the second cycle of 95 %. So the increased about 14 %. The implementation of learning model of STAD and TGT by using observation sheet of learning model implementation done by 3 (three) observers.

The results of this study support previous research that also implemented cooperative learning model, which was done by: 1) Frianto et al. (2016) had data result that the implementation of the model with very good category, because students can play their respective roles in accordance with the model syntax already explained by the teacher. 2) Rofiqoh (2015) indicates an increase in student activity after the implementation of the TGT learning model. 3) Gempita et al. (2011) that the implementation of *TGT* Model can improve students' understanding and students prefer to learn in groups. 4) Wijayanto (2013) that accounting teachers in basic competence learning to prepare financial statements using *TGT* model proved more effective in improving student learning outcomes than using *STAD* model.

2. Students Learning Motivation After Implementation Learning Model of STAD and TGT

Here are the results of the questionnaire of learning motivation of student's class after implementingSTAD learning model in cycle I and II.

Table 4 Students' learning Motivation using STAD model in Cycles I and II

No	indicators	Cycle I		Cycle II	
		%	Criteria	%	Criteria
1	Feeling Happiness	81	high	91	high
2	Willingness	76	high	90	high
3	Intelligence	80	high	91	high
4	Independence	90	high	94	Very high
5	Perseverance	90	high	95	Very high
6	Tenacious facing	79	high	91	Very high
7	Extrinsic Factors	85	high	92	Very high
	Total average	83	high	92	Very high

Table 4 shows that after the implementation of the STAD learning model, all the indicators of student learning motivation increase from cycle I to cycle II. The average number of students' learning motivation percentage in cycle I is 83% with high criterion while in cycle II 92% with a very high criterion, so there is an increase of 9%.

This is the result of the questionnaire of students' motivation after implementing learning model in cycle I and II.

Table 5 Students' learning Motivation using TGT model in Cycles I and II

No	indicators	Cycle I		Cycle II	
		%	Criteria	%	Criteria
1	Feeling Happiness	85	high	96	Very high
2	Willingness	80	high	94	Very high
3	Intelligence	80	high	95	Very high
4	Independence	92	Very high	96	Very high
5	Perseverance	88	high	94	Very high
6	Tenacious facing	81	high	95	Very high
7	Extrinsic Factors	90	high	96	Very high
	Total average	85	high	95	Very high

Based on table 5 it is clear that after the implementation learning models of TGT, all indicators of student learning motivation increased from cycle I to cycle II. An average number of student learning motivation percentage in cycle I is 85% with high criterion while in cycle II equal to 95 % with criterion so high that there is an increase of 10%.

The results of this research support previous research conducted by 1) Frianto et al. (2016) showed that the implementation of the learning model Cooperative Learning Team Game Tournament and Fan N Pick goes well. The model can improve students' motivation and learning outcomes. 2) Syukur et al. (2017) an increase in student learning motivation after the implementation of STAD and TGT model.3) Linamik (2010) an increase in motivation after the application of STAD model can be seen from the average value of student implementation in cycle I 80, 96%, Cycle II 87.62%. 4) Naqilah. (2014) the application of TGT learning can improve learning motivation and student learning outcomes of cognitive and affective domains. 5) Van Wyk. 2015 that the implementation of type STAD learning model can increase students' learning motivation in learning IPA increased from 29% at the first condition become 65% in cycle I and increased to 92% in cycle II.

3. Student's Learning Outcome After Implementation STAD and TGT Learning Model

Students' learning outcomes are obtained from the pre- and post-test scores. This is the Recapitulation of Student Learning Results before and after the implementation of the STAD learning model in the first and second cycle so that the comparison can be clearly known.

Table 6 Student Learning Outcomes before and after Application of STAD Learning Model In Cycle I and II

No.	Description	Cycle I		Cycle II	
		Pre-Test	Post-Test	Pre-Test	Post-Test
1.	Average Score	53,06	74,35	76,13	90
2.	Maximum Score	80	90	85	100
3.	Minimum Score	25	60	65	80
4.	Students Complete the subject	5 16,13%	25 80,65	24 77,42%	31 100
5.	Students Not Complete the subject	26 83,87%	6 19,35	7 22,58%	0 0

Table 6 shows that students' learning outcomes in the first cycle before implementing STAD learning model that is students who have not complete 26 people (83.87%), students who complete subject 5 people (16.13%). After implementing STAD learning model indicating that students who have not complete subject 6 people (19.35%) while students who complete subject 25 people (80.65%).

While in the second cycle before implementing STAD learning model shows students who have not completed 7 people (22.58%), students who complete learning 24 people (77.42%). After implementing STAD learning model showed that all students have complete study 31 people (100%).The following data Recapitulation of Student Learning Results before and after the implementation of the TGT learning model in cycles I and II, so it can be clearly compared

Table 7 Student Learning Outcomes before and after Application of TGT Learning Model In Cycle I and II

No.	Description	Cycle I		Cycle II	
		Pre-Test	Post Test	Pre-Test	PostTest
1.	Average Score	57,58	75,32	74,35	90,16
2.	Maximum Score	75	95	85	100
3.	Minimum Score	45	65	65	85
4.	Students Complete the subject (%)	6 19,35	26 83,87	18 58,06	31 100
5.	Students Not Complete the subject (%)	25 80,65	5 16,13	13 41,94	0 0%

Table 7 shows that the students' learning outcomes in cycle I before implementing TGT learning model is the students who have not complete the subject 25 people (80.65%), students who complete the subject 6 people (19.35%). After applied TGT learning model, showed that students who have not finished the subject 5 people (16.13%) students who thoroughly the subject 26 people (83.87%).

While on the second cycle before implementing TGT learning model shows students who have not completed the subject 13 people (41.94%), students who complete the subject 18 people (58.06%). After applying the TGT learning model, it shows that all students have finished the subject (100%).

The results of this research support previous research that also implementing cooperative learning model, which was done by 1) Purnawati (2009) stated that the improvement of student learning achievement after implementing STAD model.2) Safari & Berimani (2017) showed there were significant differences between the mean scores of 2 (two) groups from post-test idioms. Group STAD shows better Idiom post-test. There was found no significant difference between the average score of male and female students on the post-test idioms. 3) Tiantong & Teemuangsai (2013) that the learning process went well because post-test results increased after the implementation of STAD. 4) Rofiqoh (2015) indicates an increase in student achievement after the implementation TGT learning model. 5) Gempita et al. (2011) explain that: (1) Application of the TGT Model provides many benefits of learning in the form of tournaments that can improve students' understanding; (2) Students prefer group learning (cooperative). (3) Students' learning outcomes were very good and achieve learning mastery. 6) Wijayanto found (2013) that there was a difference of average result of post-experiment class II (TGT) higher than experiment class I (STAD). 7) Saifuddin et al. (2016) The results showed that cooperative learning model type TGT more impact on learning outcomes and student motivation compared with STAD model.

4. Problems Faced in Implementing STAD and TGT

Some of the problems faced by teachers during implementing STAD learning models are: (a) It takes a long time (b) The role of the teacher complex as a facilitator, mediator, motivator and evaluator well. (c) Needed appropriate facilities and infrastructure also teachers should be professional.

The weakness of learning STAD can be overcome by preparing Student Activity Sheets and improve the quality of teachers by the Government, besides that teachers should be more active in the development of learning.While the weakness of learning TGT according to Slavin (2009) is: (a) takes a very long time, (b) Teachers must be good at selecting materials that appropriate with the model of learning TGT, (c) teachers must prepare themselves for teaching and learning activities, (d) difficult in the forming of groups, (e) students who are clever but difficult to transfer their knowledge to members of other groups. While the other weaknesses in TGT (Teams Games Tournament) is a tournament activity that requires a relatively long time, therefore teachers are expected to better prepare themselves in managing the time so that learning appropriate with the time set.

TGT has several advantages according to Slavin (2009), among others (a) will create togetherness, mutual respect among group members, (b) Students are more eager to join in teaching learning activities, (c) students become happier in following the lesson.The solution to the above TGT learning weaknesses is the teacher as the key and meticulous in determining the division of the group, and the teacher can master the class and be active in giving direction to the students in transferring their knowledge to other members.

CONCLUSION

The conclusion from this research that is: (1) The level of success of the implementation of STAD and TGT learning models has improved in cycle I with good criteria and cycle II with very good criteria, (2) Implementation of STAD and TGT learning model can improve students' learning motivation. This can be shown in cycle I with high criteria and in cycle II with very high criteria. (3) Implementation of STAD and TGT learning model can improve student learning outcomes, this is indicated by the increase in the average scores of students and completeness of classical learning at the end of the action. (4) In the implementation of STAD and TGT learning model, there are constraints and advantages.If teachers are able to optimize the advantages that

exist, then these constraints can certainly be reduced. With good learning planning, for example, prepare Student Activity Sheet, pay attention to time allocation, good class management, mastery of materials and improve the quality of teachers with the Training held by the Government, in addition, teachers should be more active in the development of learning.

RECOMMENDATION

Based on the results obtained research it can be suggested as follows:

1. Before the implementation of STAD and TGT learning model should the teacher explain the specific learning objectives to be achieved so that students know which material should be mastered and equipped with literature so as to improve student competence.
2. Based on the results of current and previous research, that the implementation of STAD and TGT model can improve students' learning motivation, so it is suggested to the teacher to apply this model or other cooperative model adapted to the material.
3. Implementing learning model of STAD and TGT can improve student learning outcomes, so expect more serious teachers apply it to improve the quality of student learning outcomes.
4. To anticipate the problems in applying STAD and TGT learning model, teachers should be able to create a conducive atmosphere so that students can interact with students and teachers. In addition, it is better for teachers to better prepare the materials, tournaments, and tools related to the tournament because it can influence the successful use of this learning model.

REFERENCES

Frianto, Soetjipto, B.E., & Amirudin, A. 2016. The Implementation of Cooperative Learning Model Team Game Tournament and Fan N Pick To Enhance Motivation and Social Studies Learning Outcomes. *IOSR Journal of Humanities and Social Science (IOSR-JHSS) Volume 21, Issue 5, Ver. 7 (May. 2016) PP 74-81.*

Gempita, A., Djatmika, E.T &Bukhori I.2011. *Penerapan model TGT (Team-Games-Tournaments) untuk meningkatkan hasil belajar pada mata pelajaran keamanan, kesehatan, keselamatan kerja dan lingkungan hidup (studi pada kelas X APK SMK Muhammadiyah V Kepanjen).*Tesis tidak diterbitkan. Universitas Negeri Malang.

Hamalik, O. 2014. *Proses Belajar Mengajar*. Jakarta : PT. Bumi Aksara.

Hopkins, D. 2011. *Panduan Guru Penelitian Tindakan Kelas* (penerjemah Ahmad Fawaid). Yogyakarta: Pustaka Pelajar.

Kunandar.2013. *Penilaian Autentik (Penilaian Hasil Belajar Peserta Didik Berdasarkan Kurikulum 2013).*Jakarta : Raja Grafindo.

Linamik. 2010. *Penerapan Pembelajaran Berdasarkan Masalah melalui Pembelajaran Kooperatif STAD untuk meningkatkan Motivasi dan Hasil Belajar pada siswa kelas VII SMPN 1 Pasuruan*. Tesis tidak diterbitkan. Universitas Negeri Malang.

Naqilah.2014. *Penerapan Pembelajaran Kooperatif tipe TGT untuk meningkatkan Motivasi dan Hasil Belajar IPS pada siswa kelas V SDN Purwantoro 08 Kota Malang*.Tesis tidak diterbitkan. Universitas Negeri Malang.

Negeri Semarang.

Purnawati, N. 2009. *Penerapan Model Pembelajaran Kooperatif Tipe STAD Dalam meningkatkan Prestasi Belajar Siswa Mata Pelajaran Akuntansi Kelas X AK-2 SMK Kristen 1 Surakarta*. Tesis tidak diterbitkan. Universitas

Rofiqoh, H.2015. *Perbandingan Model Pembelajaran Kooperatif Tipe TGT (Teams GamesTournament) dengan Tipe Jigsaw dalam Upaya Meningkatkan Aktivitas dan PrestasiBelajar Peserta Didik pada Pembelajaran Fiqih di MIN Ambarawa.* Tesis tidak diterbitkan. Universitas Negeri Malang.

Safari, S.& Berimani, S.2017. The Effect of STAD Technique on the Idiom Learning ofLow-Intermediate Institute Language Learners. *Science Journal of Education. Vol. 3, No. 2, 2015, pp. 30-36*.

Saifuddin, Suryadharma I.B., Habiddin.2016. *Efektifitas Penerapan Model Pembelajaran Kooperatif Tipe Tgt Dibandingkan Stad Terhadap Hasil Belajar Dan Motivasi Siswa Kelas XI SMKN 1 Bangil Pada Pokok Bahasan Senyawa Hidrokarbon.* Tesis tidak diterbitkan. Universitas Negeri Malang.

Slavin, R. E. 1995. *Cooperative Learning Theory, Research And Practice Massachusett*. USA: Allymand & Bacon.

Slavin, R. E. 2005. C*ooperative Learning Theory, Research And Practice* (N. Yusron. Terjemahan) London: Allymand & Bacon.

Sudjana, N. 2005. *Penilaian Proses Belajar Mengajar*. Bandung : PT. Remaja.

Syukur, I.A, Muhardjito, & Diantoro, M.2017. *The Comparison Between STAD And TGT On Students Achievement And Motivation: Senior High School.* Tesis tidak diterbitkan. Universitas Negeri Malang.

Tiantong, M. & Teemuangsai, S. 2013. Student Team Achievement Divisions (STAD) Technique through

theMoodle to Enhance Learning Achievement. *International Education Studies*; *Vol. 6, No. 4; 2013.*

Van. Wyk, M.M. 2015. The Effects of the STAD-Cooperative Learning Method on Student Achievement, Attitude and Motivation in Economics Education*. J Soc Sci, 33(2): 261-270 (2012)*

Wijayanto, D. 2013. *Studi Komparasi Hasil Belajar Kompetensi Dasar Penyusunan Laporan Keuangan Menggunakan Mo del Pembelajaran STAD (Student Teams Achievement Divisions)dan TGT (Teams Games Tournament)Pada Siswa Kelas XI IPS SMA Negeri 2 Pekalongan Tahun Ajaran 2012/2013*. Tesis tidak diterbitkan. Universitas Negeri Semarang.