

APPLICATION MODEL LEARNING TEAM GAMES TOURNAMENT ON STUDENTS' MATHEMATICS LEARNING RESULTS

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Abstract. This study aims to determine the success of increasing the application of the team games tournament (TGT) learning model to mathematics learning outcomes in grade VIII students of YKK Ebenhaezer Mimika Papua Junior High School. This research included the type of Classroom Action Research with the research subjects of grade VIII A students at SMP YPK Ebenhaezer Mimika Papua totaling 29 students. The research design used the Kemmis and Mc. Taggart model. The results showed that mathematics learning outcomes in grade VIII A students at SMP YPK Ebenhaezer could be improved using the team games tournament (TGT) learning model. After the first cycle of actions, students who met the KKM 18 students (62%) and did not meet the KKM 11 students (38%). After the second cycle of action, 22 students met the KKM (76%) and did not meet the KKM 7 students (24%). The results of teacher activity in cycle I were 66% and in cycle II there was an increase to 77%. As for the results of student activity in cycle I, which was 70% and in cycle II there was an increase to 76%.

Keywords: Learning Outcomes, Learning Models, Team Games Tournament

Abstrak. Penelitian ini bertujuan untuk mengetahui keberhasilan peningkatan penerapan model pembelajaran *team games tournament* (TGT) terhadap hasil belajar matematika pada siswa kelas VIII SMP YPK Ebenhaezer Mimika Papua. Penelitian ini termasuk jenis Penelitian Tindakan Kelas (*Classroom Action Research*) dengan subjek penelitian siswa kelas VIII A di SMP YPK Ebenhaezer Mimika Papua yang berjumlah 29 siswa. Rancangan penelitian menggunakan model Kemmis dan Mc. Taggart. Hasil penelitian menunjukkan bahwa hasil belajar matematika pada siswa kelas VIII A di SMP YPK Ebenhaezer dapat ditingkatkan menggunakan model pembelajaran *team games tournament* (TGT). Setelah dilakukan tindakan siklus I, siswa yang memenuhi KKM 18 siswa (62%) dan tidak memenuhi KKM 11 siswa (38%). Setelah dilakukan tindakan siklus II, siswa yang memenuhi KKM sebanyak 22 siswa (76%) dan tidak memenuhi KKM 7 siswa (24%). Hasil aktivitas guru pada siklus I yaitu 66% dan pada siklus II terjadi peningkatan menjadi 77%. Sedangkan untuk hasil aktivitas siswa pada siklus I yaitu 70% dan pada siklus II terjadi peningkatan menjadi 76%.

Kata Kunci: Hasil Belajar, Model Pembelajaran, Team Games Tournament

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INTRODUCTION

According to Rustaman (2001) the process learning is process which in In it there are interaction activities between teacher-student and communication lead come back which in progress in situation educative for reach destination study (Santosa et al., 2014). In process learning, there is two components that cannot be separated, namely teacher and students. Interaction between teacher and student must intertwined optimal so that results study students can achieved. Student have role for follow involved as participant, try and capable to do exploration self by Keep going continuously. Exploration which conducted students must be done continuously because it can develop ability and understanding student. Student who are active participants and exploration self is called an active learning system. Active Becomes participant is capable for ask moment session ask answer and also don't hesitate to try to do the questions which given after exposure Theory.

Teacher have role which very important in process activity study teaching because it really determines strategy learning. A teacher must capable designing appropriate learning strategies. Strategy learning which appropriate capable determine succeed or whether or not process learning in in class so that learning objectives that are expected to be achieved (Saputri & Kamsurya, 2020). Even capable create a conducive learning atmosphere with goals student comfortable in activity study teach which could deliver student reach destination which expected. Destination which expected teacher could be measured on when the evaluation is in the form of test results that can be said understanding participant educate about Theory.

Model learning capable help the teacher to create an atmosphere conducive learning so that success activity study teach could achieved (Kamsurya, 2021). According to Bern and Erickson (2001) cooperative learning (learning cooperative) is a strategy learning which organize learning with use group study small of them are students work together to achieve destination study. From some of these opinions it can be concluded that strategy learning with centered on student (student centered) and model learning cooperative could increase liveliness student learning. Results of learning strategies in on is enhancement activity study student in follow process learning and liveliness student in process study teach the moretall capable increase learning outcomes which achieved (Prasasti et al., 2019).

Rasul (2020) learning mathematics is process gift experience study to students through a series of activities which planned so that participant educate get competence about ingredient mathematics which studied. According to Ministry of Education and Culture (2006) learning objectives mathematics in school is prepare student so that able face change

state in life through practice Act on base thinking logical, rational, critical, careful, honest and effective; prepare students to be able to use mathematics and mathematical mindset in life daily in learn various knowledge knowledge; add and develop Skills count with number as tool in life daily (Baeten et al., 2016); develop knowledge base mathematics base as supplies for continue to education medium; and shape attitude logical, critical, creative, careful and discipline. So could concluded that learning mathematics is activity learn and teach who study science mathematics (Mukasyaf et al., 2019).

Based on observation in Junior High School YPK Ebenhaezer mimika, on eye lesson mathematics teacher in give Theory teach still limited with lecture method, ask answer and occasionally use the discussion method and learning centered on teacher (teacher centered). There are students who are less active and enthusiasm of students in following the lesson tend low. Based on information which be delivered by teacher support. During process learning student tend passive. Most student be silent when given the opportunity to submit question and answer the question given. While on moment student appointed for answer questions only some students can answer the question correctly. View from the results of class VIII-A math test results known from a total of 29 student as much 17 persons have score under Criteria Completeness Minimum 69.00. Based on data the could is known that 59% of 29 students did not complete in subjects mathematics (Rasul, 2020) .

Election model learning which appropriate could create process study teach in room class Becomes fun is one of the efforts what can be done to anticipate these problems. Model learning Team Games Tournament (TGT) is model learning cooperative or working together in a team or group so that involve all student. After that students move to groups each for discuss and complete questions or problems which given teacher. As change test written student will meet in table tournament. Role student in model study this is Becomes tutor same age and contain element game which capable increase spirit study student. Model This learning is in the form of several teams or groups of 4-6 people and each individual rating will be added up Becomes evaluation every team. Expected student which has understand capable teach students who haven't and students which relatively could develop Becomes understand. Distribution group this meant so that every student could collaborate with friend, environment, and teacher. The purpose of the learning process is expected to be achieved because of the activity every student, have motivation for study as well as have readiness in follow the process of teaching and learning activities in school.

METHOD

Study this use Study Action Class (CAR) according to Arikunto (2006:3) is something observation to activity study in the form of a action, which on purpose raised and occur in a class together. Destination study action class (CAR) for repair performance practice learning in the classroom by looking at student learning outcomes objectively, namely the value of and subjective, namely student activity. The place study this held in JUNIOR HIGH SCHOOL YPK Ebenhaezer which located in Street Timika Shop water tunnel with subject The research is class VIII A year lesson 2019/2020 as many as 29 students.



Picture 1. Model Study Action Class According

Collection data obtained through Observation data obtained from observer and results study mathematics student class VIII A During process study teach. The test instrument in this study is in the form of questions choice double with question which refers to the learning indicators, namely about theorem pythagoras. Technique analysis data there are 3. formulas used for determine score results evaluation participant educate with use formula:

$$N = \frac{\text{Earned value}}{\text{Maximum score}} \times 100$$

According to Sudijono (2015) for calculate student learning activity data and teacher analyzed with use percentage, with use formula as following:

$$P = \frac{F}{N} \times 100\%$$

Information:

P : Percentage

F : The frequency of activity of students and teachers

N : Number of student and teacher activities

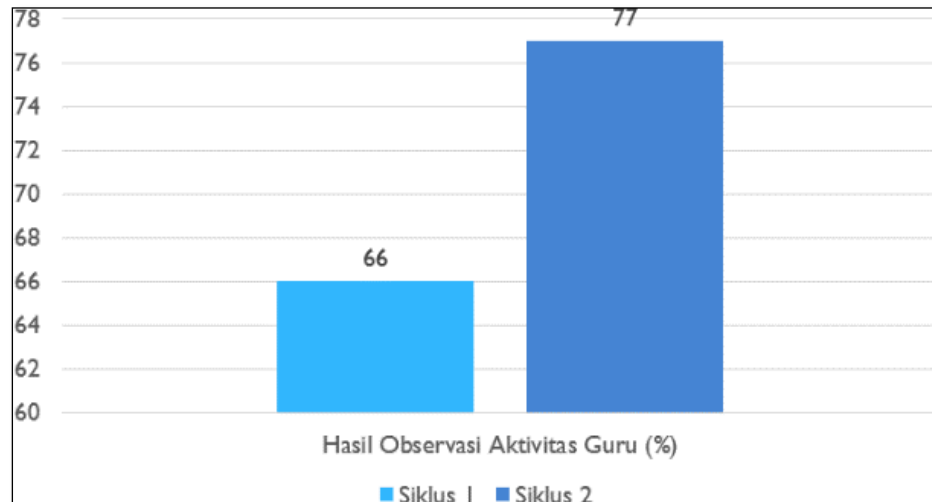
RESULTS

Results study this shared Becomes 2 cycle. In cycle I obtained the mean value class 67.59 enter in category enough with score completeness classic student by 62%. Teacher activity observations cycle I is 66% and enter category enough. The results of student observations of 70% and fall into the category enough. Reflection cycle I is Teacher should could condition the class with instruction to students with volume voice which tall and give penalty for student which playing around During process learning so that no use up many times for repeating so that activity process learning Becomes conducive. Teacher should convey about competence base, indicator achievement competence and KKM so that whole student could understand competence base, indicators of competency achievement and KKM on learning the. Teacher should give time for think and give opportunity student for respond to the teacher's explanation. Teacher should notice condition student moment present the material in front of the class so that all students pay attention seriously and mean it moment teacher serve Theory in front class. Teacher should provide a reference for students for answer question teacher. Teacher should provide supervision to students to increase participation in group so that student involved active in group discussions. Teacher should give lead come back from problem about Theory which taught after close discussion.

Teacher should can minimize noise moment formation group tournament so that the atmosphere of tournament games Becomes conducive. Teacher should give supervision by maximum to Act in demand student During game held so that atmosphere tournament to be conducive and should allow students to convey difficulty which experienced to Theory which studied with use model learning team games tournament (TGT). Teacher should provide feedback and follow up on student in close lesson.

In the second cycle, the average value of the class 76.21 enter in category good with students' classical completeness score is 76%. Results observation activity teacher cycle II is 77% and is in the good category. Results observation student as big as 76% and enter in category good. Reflection cycle II is teacher should give opportunity on student for respond explanation teacher. Teacher should more clear in providing references to students for answer question teacher. Teacher should more maximum in provide supervision to students for increase participation student in group. Teacher should allow students to convey difficulty which experienced to Theory which studied, and teacher should give feedback on student.

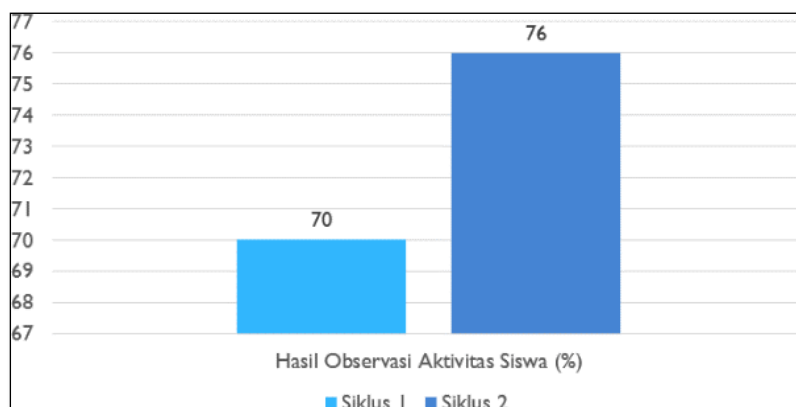
Results analysis data observation to activity teacher on process learning cycle I and cycle II which were carried out in study this is known that process learning Becomes more good.



Picture 2. Results observation teacher activity

Obtained enhancement average score observation on cycle II that is 23.667 with percentage 66% category enough Becomes 27,667 with percentage 77% category good. Thing this occur enhancement as big as 4.0. Results reflection constraint on Cycle I is a reference for teachers to do effort repair on cycle II. So that in cycle II there was an average increase score. This increase occurred due to various deficiency on cycle I has repaired in cycle II. This means that the process learning with apply model learning team games tournament (TGT) to results study mathematics student class VIII Junior High School YPK Ebenhaezer Mimika which has held walk with good and success increase activity teacher.

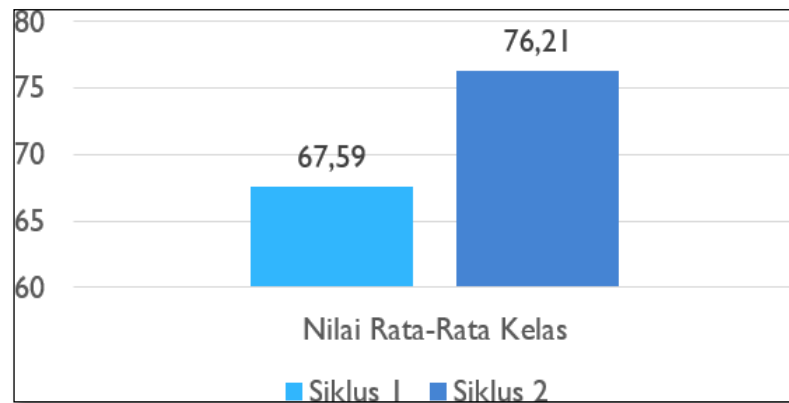
Results observation activity student could is known that on cycle I there is a number of aspect which still not enough.



Picture 3. Results observation activity student

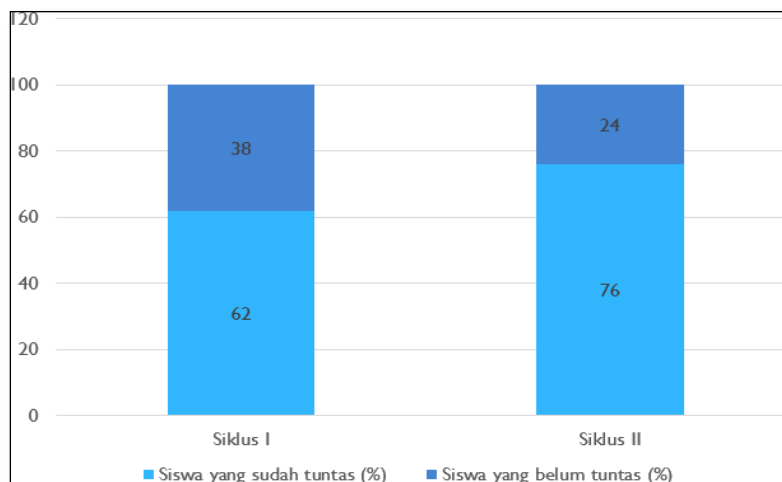
On cycle to II teacher already good in apply model learning team games tournament (TGT) this seen from increase in the average score of student activity in cycle I that is 30,667

with percentage 70% which means activity student still belong to category enough. Then increase on cycle II with average score activity student that is 33,433 with percentage 76% which means student activity belong to category good though still there is a shortage on several aspects. Results study student experience increase in cycle II in terms of the value of average test.



Picture 4. Average value class

Score average class on cycle I as big as 67,586 with completeness study classic 62% then increase on cycle II as big as 76.206 with completeness study classic 76%.



Picture 5. Completeness study classic student cycle I and II

Obtained enhancement completeness study classical students by 14%. This is happening because enhancement activity teacher and student in cycle II so that it affects the results study student. From results study which has conducted obtained description that learning with apply model learning team games tournament (TGT) increase activity from aspect activity teacher nor student so that occur enhancement results study student. So, could concluded that model learning team games tournament (TGT) makes the learning process more Becomes pleasant.

CONCLUSION

Application model team games tournament (TGT) could increase activity teacher and student on process learning. From results analysis activity teachers in the first cycle obtained an average score 23.667 with percentage 66% which classified as sufficient category and in cycle II with acquisition score average 27,667 with percentage 77% which belong to category good. Whereas for activity students in the first cycle obtained an average score 30,667 with percentage 70% which classified as sufficient category and in cycle II with acquisition score average 33,433 with percentage 76% which belong to good category. It has fulfilled indicators of the success of this research, namely 75% implementation in accordance with plan learning which set. Student learning outcomes of class VIII A SMP YPK Ebenhaezer Mimika through model learning team games tournament (TGT) increased in every cycle. On cycle I there is 11 persons from 29 student which no Fulfill KKM, whereas the rest capable Fulfill KKM. The average value of the first cycle is 67,586 with completeness study classic 62%. On cycle II as much 22 students have learning outcomes that meet the KKM with average score 76.206 with completeness study classic 76%. Thing the already meet the indicators of research success that is 75% of class VIII A students achieve KKM that has been determined by the school, namely 69.

RECOMMENDATIONS

Based on conclusion results the above research, team learning model games tournament (TGT) could increase results study student, so recommended things as following (1) should teacher always try increase quality learning on every process learning mathematics, (2) model learning team games tournament (TGT) could made wrong one learning which innovative in improve student learning outcomes in the eyes lesson mathematics nor eye lesson which different, and (2) creativity teacher good in media learning nor process activity study teach very required so that could increase results study student.

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