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Effectiveness of Cooperative Learning Model Type Stad - Based on Skills 4c - On Education & Training for Strengthening of Principals of Batch 18 - In the Development Agency of Human Resources of Jakarta Province 2019

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Abstract:- This study aims to determine the effectiveness of STAD type cooperative learning models with 4C skills in PKS Training for Class 18 of 2019 Fiscal Year organized by BPSDM DKI Jakarta Province. The subjects of this study were 30 PKS PKS training participants. In the cooperative learning process the training participants were divided into 6 groups, each group consisting of 5 training participants with random shares. In one day of learning widyaiswara delivered two different types of training courses to participants through presentation activities. Training participants then gather with their respective groups to discuss each of the training courses, through this group each group member ensures that his group members master the material presented by widyaiswara. After that, then each individual works on the quiz, the value of this individual quiz will then be accumulated into group scores, therefore each individual is responsible for the points earned by his group.The effectiveness of the learning model is measured through the learning outcomes of training participants in cycle I and cycle II which are assessed through worksheets provided by widyaiswara on each training material and through increasing the activity of training participants in 4C skills assessed from the results of questionnaires, observations and interviews with training participants and learning outcomes of training participants. Achievement of the average percentage of learning activeness of training participants in the first cycle was 78.6% and in the second cycle increased to 91.6%. The percentage increase in training participants' activity from cycle I to cycle II was 16.5%. The positive impact of the increased learning activeness of training participants is an increase in learning outcomes. The average value of the pre-stage cycle is 38, the average value in the first cycle adal ah 63.8 and the average value in the second cycle is 77.1. The percentage increase in learning outcomes from cycle I to cycle II was 13.7%.

Keywords:- *Cooperative Learning Model, 4C Skills.*

I. INTRODUCTION

Quality of Human Resources (HR) plays an important and strategic role in determining the future of a nation. Mastery of science and technology is one of the characteristics of quality human resources. Whether or not a nation is advanced depends on the quality of the nation's education. Talking about education then all will go back to school. Education has an important role in producing quality human resources. To print quality human resources, of course, obtained from a good educational process. A good education process is produced from a well-managed educational institution, where all elements have their respective roles in determining the quality of an educational institution. The success of the teaching and learning process requires the role of various parties, one of them is the principal. headmaster plays an important role as a leader in school management, including organizing of teachers and learners. For this reason, the principal must have sufficient competence to mobilize and develop all the potential that exists in the school so that positive changes occur that can be seen from student learning outcomes. In order to map the competencies headmaster, in 2015 the Ministry of Education and Culture (Education) held a competency test Principal (UKKS) followed by 166 333 principals of the type, level and duration of action varies.

In detail, based on the results of the UKKS conducted in 2015, the following results were obtained: The national average score was 56.37; The average UKKS dimension values are as follows, learning leadership: 43.96; entrepreneurship: 5 8, 7 5; managerial: 5 8, 55; supervision: 51, 81; and school development efforts: 47.67. The average scores for the levels are: headmaster 60, 89; Head of Vocational School: 60, 52; Middle school head: 6 0, 17 and elementary school head: 56, 80. From the results of the 2015 DKI Jakarta UKKS data obtained that the average UKKS value ranges from 50-60. The breakdown was that the score of the elementary school principal was 50.58 with 2238 participants and 54.54 junior high school principals with 680 participants. As for high school, the average UKKS score was 57.08 with 342 participants and 52.03 SMK with 377

participants. The average value obtained on the heads of primary schools, junior high schools and vocational lower than the national average and also lower than the minimum threshold value of competence in 55 as stipulated in Permendiknas No. 13 T ear 2007 on the Standard Principal / Madrasa. Only the average score for UKKS SMA has reached the minimum threshold of competency for school principals. Based on data from DKI Jakarta UKKS results from elementary to high school levels presented in Tables 1 to Table 4, shows that the average competency of principals in the DKI Jakarta area is still in the category of less competent. This shows that the competency problem of the principal needs special attention. This phenomenon is something that needs serious attention, how the process of education in schools that have been running so far is handed over to someone who is incompetent management. Empirically it can be observed that competent principals will be seen in improving the quality of their schools and when school principals are replaced with less competent people their impact on the quality of their schools will be seen.

In 2019 BPSDM DKI Jakarta Province held 20 PKS Education and Training with the training participants coming from Head of State Schools from various levels in the DKI Jakarta area. In accordance with the DKI Jakarta Province Regional Strategic Activities (KSD) as stated in the DKI Jakarta Province Governor Decree (Kepgub) No. 1042 of 2018 which was promulgated on July 5, 2018 there were 60 regional strategic activities. Event strategic 4th field Education is improving the quality of teachers and education personnel through training and certification. In order to support the achievement of these strategic activities, one of the activities undertaken is through increasing the competency of school principals through PKS Training. The following are the targets for PKS training up to 2020 based on sources from the 2018 DKI Jakarta Education Agency:

No.	districts	Training Institution	Target
1	Kab. The Thousand Islands	Universitas Jakarta District	18
2	Central Jakarta	West Jakarta State University	283
3	South Jakarta	Muhammadiyah University	633
4	west Jakarta	DKI Jakarta BPSDM	1,200
5	North Jakarta	Atma Jaya University	417
6	East Jakarta	Uhamka	579
	Total		**3.130**

Table 1:- PKS Training Target in DKI Jakarta Until 2020

In Annex V of the Regulation of the Director General of Teachers and Education Personnel No. 26017 / BB 1.3 / 2018 about Technical Guidelines for the Assignment of Teachers as the Principal noted that the instructional model designed in Training MCC is learning face to face learning experience integrates aspects of knowledge, skills, and attitudes with empirical experience in accordance with the characteristics of training participants. In Juknis is not mentioned specifically about the type of method of learning used by widyaisara so as to realize the learning process as mentioned in the guidelines are and be able to achieve their competencies, the necessary knowledge and ability of trainers in designing effective learning, efficient and address the needs of the competence of the head the school. Knowledge is one of them is a lawyer use be an innovative learning model through the implementation of cooperative learning.

Cooperative learning is a learning strategy that emphasizes joint attitudes or behavior at work or helps others in the structure of regular cooperation in groups. Through this cooperative learning, training participants learn in small groups consisting of 4-6 people who are equal but heterogeneous, abilities, gender, ethnicity or race, and help each other. The purpose of forming the group is to provide opportunities for all training participants to be actively involved in the thought process in learning activities. While working in groups, the task of the training participants is to achieve the completeness of the training material and help each other among group members to achieve learning objectives.

Rokhim and Mustafa (2015) d natural Cooperative Learning Strategies journal mentions a da lot of variety of cooperative learning model, among other Student Teams Achievement Division (STAD), Numbered Head Together (NHT), Think Pair Share (TPS), and Jigsaw. In the STAD type of learning model, training participants are divided into groups of 4 to 6 people with diverse abilities, widyaiswara conveys a training course and training participants in the group ensure that all group members master the training material, then training participants are given an individual quiz on material training that has been studied, then their values are added up to get a group value. In the type of NHT the learning model is the participants of group training and discussion in understanding the tasks given. This learning in its implementation includes four main components namely numbering, questioning, head together, and answering. In the type of TPS the learning model is that the training participants

are invited to think about a question or an issue independently for a few moments, then pair up to discuss what they have thought. This interaction is expected to be able to share answers if a question has been asked if a specific problem has been identified. Then share with the whole class what they have talked about. In the Jigsaw type the learning model is emphasizing the social aspects of learning. Students are divided into small groups are heterogeneous, particularly in academic skills yes. In the group there is the term origin group and expert group. Each training participant is given material / tasks in the original group, then training participants who have the same material gather in a new group called a group of experts to understand the material of their expertise. Then return to the home group to teach material expertise to friends of the group (home group).

Cooperative learning model STAD emphasis on activity and interaction among the participants of the training to motivate each other and help each other in mastering a training material. In cooperative learning the type of STAD training participants are divided into study groups consisting of 4-6 people with different levels of ability, gender, and ethnic background. This learning model emphasizes the activity of the training participants in developing the concept / knowledge to solve problems faced by each member of the group to get the task, their direct interaction between mite t a training group, coach training participants develop social skills, and most importantly, improve the ability of training participants to speak and act, so that their academic abilities increase. Widyaiswara was interactive in this learning and became a mediator for training participants in the learning process. Through this learning method is expected to reach Objective of learning in order to print a headmaster competent and professional and able to reflect the five dimensions of competencies required of principals. This STAD cooperative learning model is the first time applied in PKS training and it is hoped that through this learning model can increase the effectiveness of PKS training learning outcomes, therefore this research is carried out to find out the effectiveness of applying STAD type cooperative learning models in Batch 18 training conducted by DPSDM DKI Jakarta Province Fiscal Year 2019.

This study aims to determine the effectiveness of the application of the 4C skill -based STAD type cooperative learning model in the PKS 18th Education Training organized by BPSDM DKI Jakarta Province Fiscal Year 2019.

II. LITERATURE REVIEW

A. *Effectiveness of Learning*

According to Drucker management experts in Handoko (2009) effectiveness is the ability to do the right thing or to get things done properly. This includes selecting the most appropriate target and choosing the appropriate method for achieving that goal. Effectiveness is the activeness, usability, existence of conformity in the activities of people who carry out tasks with the intended target. Effectiveness in general shows how far the achievement of a goal that has been determined in advance. The word refers more effectiveness at the *output* which has been targeted. Effectiveness is a very important factor in disable in because it determines the level of success of a learning model used. Based on the description above it can be concluded that effectiveness is a condition that shows the extent to which plans can be achieved. The more plans that can be achieved, the more effective these activities are, so that the word effectiveness can also be interpreted as the level of success that can be achieved from a particular way or effort in accordance with the objectives to be achieved.

According to Sardiman (2011) learning is a psychophysical activity leading to complete personal development. Then in the narrow sense, learning is an effort to master the material knowledge which is part of the activity towards the formation of the whole personality. According to most experts, learning is a process of change where the change is the result of experience. According to Winkel in Darsono (2000) Stated that learning is a mental or psychic activity that takes place in an active interaction with the environment that result in changes in knowledge, understanding, skills and value attitudes. Arikunto (1990) means that learning is a process that occurs because of an attempt to make changes to the human being who does, with the intention of obtaining changes in him, either in the form of knowledge, skills or attitudes. B elajar is a change in behavior.

According to Benjamin Bloom in Nana Sudjana (2010) classification of learning outcomes include:

1) The cognitive domain, with regard to intellectual learning outcomes consisting of six aspects including knowledge, understanding, application, analysis, synthesis, and evaluation.
2) Affective domain, with regard to attitudes consisting of five aspects including acceptance, answers, judgment, organization, and internalization.
3) Psychomotor domain, with regard to learning outcomes in the form of skills and the ability to act, covering six aspects namely reflex movements, basic movement skills, perceptual abilities, accuracy, complex skills, and expressive and interpretive movements.

According to Popham (2003) the effectiveness of the learning process should be viewed from the relationship of certain teachers who teach certain groups of students, in certain situations in trying to achieve certain instructional goals. The effectiveness of the learning process means the level of success of teachers in teaching certain groups of students by using certain methods to achieve certain instructional goals. Dunne (1996) argues that the effectiveness of learning has two characteristics. The first characteristic is "making it easier for students to learn" something useful, such as facts, skills, values, concepts or something desired learning outcomes. Second, that skills are recognized by those who are

competent in assessing, such as teachers, supervisors, tutors or students themselves. Eggen and Kaucha k (2015) suggested that the effectiveness of learning is characterized by the activeness of students in learning, especially in organizing and finding information. Therefore, the more active students are in learning, the more effective learning is carried out.

Slavin (2005) says that the effectiveness of learning can be measured using four indicators as follows:

1) The quality of learning (*quality of insurance*), i.e. how much is the level of information presented so that students can easily learn it or the level of error is small. The smaller the level of error made means more effective learning. Determining the level of effectiveness of learning depends on achieving mastery of certain teaching goals, usually called mastery learning;
2) Suitability level of learning (*appropriate level of instruction*), namely the extent to which the teacher ensures the level of readiness of students in accepting new material;
3) Incentives, namely how much effort the teacher motivates students to complete or do the tasks and study the material provided. The greater the motivation provided, the greater the student's activeness so that learning will be effective;
4) Time, i.e. time needed to complete learning activities. Learning will be effective if students can complete the lessons in accordance with the specified time.

According Sinambela (2006) learning is said to be effective when achieving the desired goals, both in terms of learning objectives and maximum student achievement with the following indicators:

1) Achievement of mastery learning;
2) Achievement of the effectiveness of student activities (ie achieving the ideal time used by students to carry out each activity contained in the learning plan);
3) The effectiveness of the teacher's ability to manage learning, and student responses to positive learning.

According to Miarso (2004) indicators that can be used to determine effectiveness in the learning process are:

1) Organizing good material;
2) Effective communication;
3) Mastery and enthusiasm for the subject matter;
4) Positive attitude towards students;
5) Fair awarding;
6) Flexibility in the learning approach;
7) Good student learning outcomes.

Based on the description of the theory of effectiveness, learning and learning effectiveness proposed by several Education Experts, researchers can conclude that the effectiveness of learning is the level of success that can be achieved from a learning process in accordance with the planned learning objectives. Referring to several theories that have been put forward, in this study the indicators used to measure the effectiveness of learning in PKS Training are learning outcomes and training participants' activities.

B. STAD Cooperative Learning Model

According to Rusman (2010) cooperative learning is a form of learning by means of students learning and working in small groups collaboratively, whose members consist of four to six people with heterogeneous group structures. Meanwhile according to Isjoni (2009) cooperative learning is a learning model where students learn and work in small groups of collaborative students whose members are 4-6 people with heterogeneous group structures. Cooperative Learning is a learning model that is currently widely used to realize student-centered teaching and learning activities *(Student Orianted)*, especially to overcome problems found by teachers in activating students, who cannot cooperate with others, students who are aggressive and do not care another. This learning model has been proven to be used in various subjects and various ages. Furthermore, Stahl in Isjoni (2009) states cooperative learning can improve student learning better and increase mutual help in social behavior.

Johnson (2007) argues that in the cooperative learning model there are five elements, namely: positive interdependence, individual responsibility, face-to-face, communication between members, and evaluation of processes to the group. Cooperative learning is a learning model that emphasizes positive interdependence among individual students, individual responsibility, face-to-face, intensive communication between students, and evaluation of group processes. From some of the definitions put forward by the experts above, it can be concluded that cooperative learning is a learning model that places training participants in small groups whose members are heterogeneous, consisting of training participants with high, medium, and low achievements, women and men with different ethnic backgrounds to help one another and work together to study subject matter so that all members learn best.

One type of cooperative learning is STAD (*Student Team Achievement Division*). STAD type cooperative learning was developed by Robert Slavin et al. d John Hopkin University and is the simplest type of cooperative learning that emphasizes the activities and interactions between students and students to motivate each other and help in understanding a subject matter. According to Slavin (200 5) STAD type cooperative learning is one of the cooperative learning models where students learn with the help of worksheets as a guideline in groups, discuss in order to understand concepts, find the right results. All members are given responsibility, all students are individually given a test that will affect the evaluation of the whole group, which consists of 4-5 people. Each team or group should have 12 heterogeneous members, both sexes (male and female), race, ethnicity, and various abilities (high, medium, low) .

Slavin (2005) divides STAD type cooperative learning into 5 main components, namely:

a. Class presentations.

Material in STAD is first introduced in class presentations. This is a direct teaching task performed by the instructor. Class presentations are only really focused on the STAD unit. With this program, students will realize that they must really pay full attention during class presentations, because this will greatly help them work on quizzes, and quiz scores determine team scores they.

b. Team

The team consists of 4 or 5 students who represent all parts of the class in terms of academic performance, gender, race and ethnicity. The main function of the team is to ensure that all team members really learn, and more specifically to prepare their members to be able to do the quiz properly. After a teacher to convey ma t erinya, the team assembled to study the activity sheet or other maeri. Most often, learning it involves discussion of the problems b ogether, comparing answers and correct any misconceptions if any member of the team made a mistake. The team is the main element in STAD. The point is to get team members to do the best for the team and the team must do the best for its members.

c. Quiz

After the teacher gives a presentation and after the team does group work, students will work on individual quizzes. Students are not allowed to help each other in quizzes, so each student is individually responsible for understanding the material.

d. Individual Progress Score

The idea behind individual scores is to give each student performance goals that will be achieved if they work harder and give better performance than before. Each student can contribute maximum points to his team in this score, but no student can do it without giving his best effort. Each student is given a score early, magnified o leh than the average of the student's performance earlier in the same quiz. Students will then collect points for their team based on the level of increase in their quiz score compared to the initial score.

e. Team Recognition

The team will get an award if their average score reaches certain criteria. Student team scores are also used to determine the percentage of group rankings.

C. 21st Century Kecap (4C)

In the book 21st Century Skills Free Education Directorate primary and secondary (2017) stated that the competence of 21st century skills include: *Critical Thinking* (Critical Thinking), *Communication* (Communication) *Collaboration,* (Collaboration) and *Creativity* (Creativity).

a. *Critical Thinking* (Critical Thinking)

Critical thinking is ability to understand a complicated issue, connect the information with other information, so that eventually emerged a variety of perspectives, and find the solution of a problem. *Critical thinking* also means the ability to reason, understand and make complicated choices; understanding the interconnection between systems, compiling, disclosing, analyzing, and solving problems.

b. Communication (Communication)

Communication is an activity to transfer information both orally and in writing. However, not everyone is able to communicate well. Sometimes there are people who are able to convey all information verbally but not in writing or vice versa. Humans are social creatures who always interact with each other. Therefore, communication is one of the most important things in human civilization. The main purpose of communication is to send messages through the selected media so that it can be understood by the recipient of the message. Effective communication occurs when the message conveyed by the communicator can be received well or the same by the communicant, so there is no misperception. So that communication between humans is effectively intertwined requires proper communication techniques. Communication technique is a method used in conveying information from communicator to communicant with certain media. With this technique it is expected that everyone can effectively communicate with one another and appropriately use it.

c. Collaboration

Is the ability to collaborate or work together, work together, adapt to various roles and responsibilities; work productively with others; put empathy in its place; respect for different perspectives. Collaboration also means being able to carry out personal responsibility and personal flexibility, at work and in community relations; set and achieve high standards and goals for yourself and others.

d. Creativity

Is the ability to develop, implement, and convey new ideas to others; being open and responsive to new and different perspectives. Creativity is also defined as a person's ability to create new mergers. Creativity will depend very much on one's creative thinking, the process of one's intellect in creating new ideas. Creativity that can produce new discoveries (and are usually economically valuable) is often referred to as innovation.

D nature of this research indicator of the effectiveness of the implementation of cooperative learning model tip e STAD will be viewed from two aspects of the learning outcomes and the liveliness of the training participants. The learning outcomes of the training participants are obtained from the value of the training participants 'worksheets which is the final assignment in each training course, while the training participants' activity is the ability of the training participants to use 4C skills during the learning process. 4C skills are very

important in supporting the principal tasks and functions of the principal.

III. RESEARCH METHODOLOGY

This type of research is a classroom action research with a quantitative approach that aims to determine the effectiveness of 4AD type -based STAD cooperative learning in the PKS Training Process for Batch 18 organized by BPSDM DKI Jakarta Province. This research was conducted by observing learning activities in the form of actions that are deliberately raised in the learning process. Such measures are given by widyaiswara to the training participants. Researchers are widyaiswara No Training MCC 18. Force researcher working with one person widyaiswara others in teaching this MCC training with classroom supervision by the LP2KS Kemendikbud Solo.

The research procedure was carried out using two cycles. 4C skill-based cooperative learning began to be applied to the main training materials (13 training materials) which include: Management Analysis Techniques, School Work Plan Development, School Financial Management, Curriculum Management, Teacher Management and Education Personnel and School Facilities and Infrastructure Management, Supervision and Assessment Teacher Performance, Supervision and Assessment of Education Workforce Performance, Sustainable Professional Development Plan, Change Leadership, Entrepreneurship Development and School Development Based on 8 SNPs. Observations were made in each cycle whether there was a change in cycle I and cycle II.

Research class action is an insane in class 18 Forces Training MCC Fiscal Year 2019 organized by BPSDM the Province of Jakarta on the date of 9 to 19 September 2019.

Research subjects are sources for obtaining data and information needed in the research process. Subjects in this study were participants Forces Training PKS 18 BPSDM P rovincial DKI Jakarta berjumah 30 people who will be divided into 5 groups, each group consisting of 6 people. Participants of this PKS Training Program are Principals from Public Elementary and Middle Schools in DKI Jakarta Province.

- *The object of this study is the STAD type cooperative learning model in PKS Training.*

This class action research was conducted in two cycles, namely cycle I and cycle II. Before starting the first cycle and the second cycle begins with the pre-cycle stage which is the preparation phase before the cooperative learning process begins. The first cycle is a learning activity on day -2 through day 5 which includes training material Engineering Management Analysis, Business Plan Development School, the School of Financial Management, Curriculum Management, and Education Personnel Management and Educational Facilities and Infrastructure Management. Sikus II is a learning activity on day -5 through day 8 includes training material Supervision and Teacher Performance Assessment, Supervision and Performance Appraisal Personnel, Profession Sustainable Development Plan, Change Leadership, Entrepreneurship Development and School Development Based on 8 SNP.

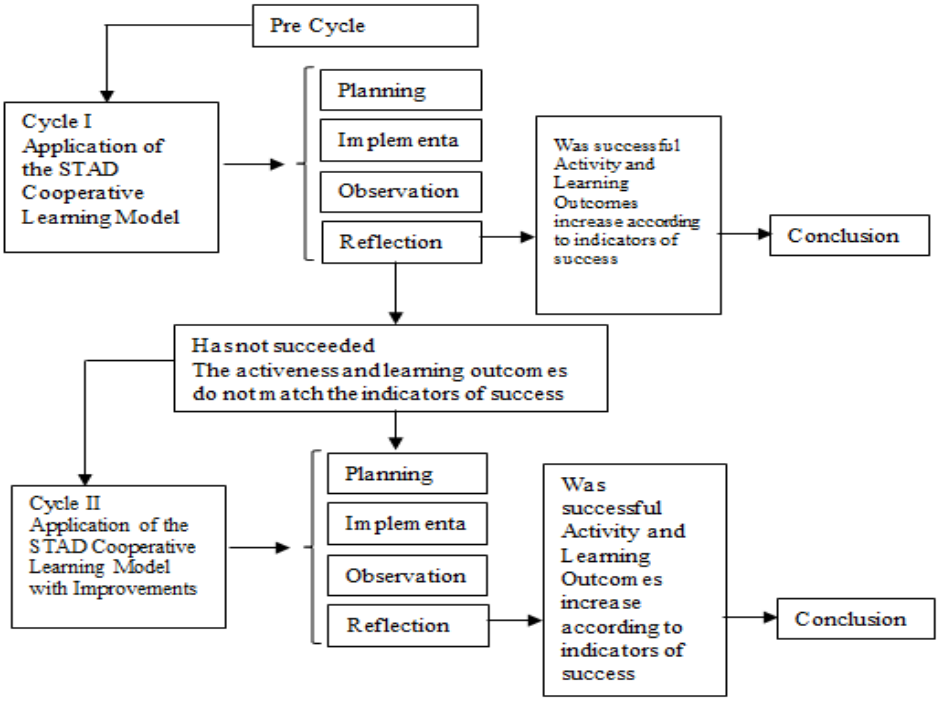

Fig 1:- Research design

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Data collection techniques carried out through observation, interviews, questionnaires, worksheets and documentation.

The data that has been obtained is then analyzed through measuring the activity of the training participants during the learning process and the achievement of learning outcomes.

IV. RESULTS AND DISCUSSION

➢ *Cycle I*

Cycle I was held on 2-5 September 2019 in the training course of 3 JP Management Analysis Techniques, Development of School Work Plans 6 JP, School Financial Management 3 JP, Management of Curriculum 2 JP, Management of Teachers and Education Personnel 6 JP and Management of School Facilities and Infrastructure 3 JP. The total time allocated for cycle I is 25 JP. Activities in the first cycle include:

1) The planning stage

At this stage the researcher prepares a learning kit consisting of lesson plans and tools, questions / worksheets and observations of the training participants' activities.

2) Implementation phase

The implementation stage includes the presentation of material, the stage of group activities, the stage of individual tests, the stage of calculating scores and the stage of awarding. Widyaiswara acts as a teacher and acts as an observer. In the initial stage widyaiswara conveyed the learning objectives and learning outcomes indicators to the training participants followed by the provision of material. After giving the material, it continued with group activities. In working groups, each group holding its members to master the material that has been given by widyaiswara. Each group gets a task and conducts a discussion to complete the task. Each group is then asked to choose a group leader and share the task with each member to find answers / information from various sources which will be discussed together to get answers in groups. So each group member must still be individually responsible for joint tasks, as well as collective / group responsibilities. This group discussion was given approximately 45 minutes or adjusted to JP. After finishing the discussion each group was asked to present the results of the discussion. Each group member is asked to be active in the presentation and answer questions from other groups. Each group presents the results of their discussion, the other groups must respond sequentially. During the implementation of the group discussion widyaiswara's tasks are motivating, encouraging, helping when there are difficulties from the group, and leading and organizing discussions so that the discussion remains directed and in accordance with the learning objectives. At the end of the presentation, the widyaiswara group gave praise / appreciation for the group's work. After the presentation activities of each group were conducted, then each training participant was given a quiz. This quiz is done by each individual, and the score obtained by each individual will determine the value of the group.

The following is an assessment of the learning outcomes and activeness of the training participants in the first cycle:

No	Active category	Frequency	Percentage
1	Very High	15	50%
2	(75-100%)	15	50%
3	High (50-	0	0%
4	74.9%)	0	0%
	Medium (25-	**30**	**100%**
	49.9%)		
	Low (0-		
	24.9%)		
	amount		
The highest percentage of activity values is 90.6%			
The lowest percentage active value is 60.9%			
The average activeness of the training participants is 78.6%			

Table 2:- Learning Activity Participants in Training Cycle I

The table above shows that the activity of the training participants included in the very high category was 15 people (50%), the high category was 15 people (50%). No training participants were included in the medium and low level conference. Overall, the average activeness of the trainees was 78.6%. In the aspect of training participants' activeness, the indicator of success was student activity ≥ 80%. In the first cycle of training participants, the participant value was ≥ 80%, as many as 8 people, and a total of 22 training participants were still below the standard indicators of success. The average activity of the training participants was 78.6%, meaning that the average score of the training participants was still below the specified indicator, which was a minimum value of 80%.

After an analysis of the training participants 'activity data, then an analysis of the training participants' learning outcomes data was conducted. The final score of learning outcomes is a combination of the final scores in all training subjects taught in cycle I. The results of the training participants in the first cycle are presented in the following table:

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No	Score	Frequency	Percentage
1	Very good (86 - 100)	0	0%
2	Good (71 - 85)	10	33.3%
3	Enough (56 - 70)	18	60%
4	Less (41 - 55)	2	6.7%
5	Very Less (<40)	0	0
	amount	**30**	**100%**
The highest value of learning outcomes 76 The lowest value of learning outcomes 41 The average value of learning outcomes 63,8			

Table 3:- Outcomes Participants Training P No Cycle I

In the first cycle, there were no training participants who received scores below 40, training participants with a score of 41 - 55 were 2 people (6.7%), a score of 56 -70 were 18 people (60%), a score of 71 - 85 were 10 people (33.3%). The lowest score is 41 and the highest score is 75. The average score of learning outcomes is 6 3, 8. Only 6 training participants received a score of ≥ 75. Thus in cycle 1 the indicators of success had not yet reached, because only 20 % of training participants achieved a minimum value of 75.

3) Observation stage

Observation of the learning process of cycle I on the activity of the training participants during the cooperative learning process assessed from the 4C parameters shows that *Critical Thinking* skills are shown by the large number of training participants who have begun to actively express opinions, input, express ideas and actively participate in group discussions. But the activity of the training participants was not evenly distributed, because it was still an adjustment process with cooperative learning methods. Many of the training participants are still familiar with the lecture method. In *Collaborative* skills, it can be seen that the training participants start to actively work in groups, but the dynamics or collaboration between group members is considered not too visible because the training participants are still in the adjustment phase. In the main activity *creativity* skills that are explored are the ability to find solutions to each problem given by widyaiswara. From the observations it can be said that the training participants have been seen to be active in this activity, but there are still some who look passive and rely on other group members, especially when working on tasks / worksheets that should be done in groups, even though in the pre-cycle stage it has been explained that each - each individual is responsible for group assignments. This happened because the training participants did not fully understand the cooperative learning method. In the *Communication* skill, the main activity that was explored was the ability of the training participants to carry out and manage effective, active communication and participate in the task execution process. From the observations, the communication between the training participants went smoothly. This is because the background of training participants who are principals so that they are accustomed to establish good communication with the entire academic community in the educational institutions they lead.

To strengthen the data obtained through observation, researchers also conducted interviews with training participants. Interviews were conducted with group leaders so that they could represent each group. Based on interviews with the application of the cooperative learning model, the majority stated that this learning method was relatively new for training participants. Training participants are familiar with the lecture learning method. There are some training participants who feel comfortable with this method, but some are still comfortable learning individually. But they stated that in fact the cooperative learning method was very appropriate to be applied in the PKS Training. This method can stimulate the activity of training participants, as a means of learning for training participants to build cooperation and communication. This is very useful in the work world of a school principal.

4) Reflection stage

In the implementation of learning activities cycle I obtained information from the results of observation and evaluation as follows:

a) The learning motivation of the training participants is quite high, but because this learning method is relatively new so that the training participants do not fully understand the meaning of cooperative learning as a result there are still many training participants who talk to other group colleagues outside the subject matter of the training, there are still some participants training that relies on other group members when working on group assignments, the division of group responsibilities is not evenly distributed. The training participants' activities were also not evenly distributed it was seen that only certain training participants were active.
b) Based on the results of the training participants' activity questionnaire, the average value obtained is included in the high category, but actually the activity has not been evenly distributed among all training participants. because there are some who look the training participants at active so as to increase the value of the activity is high.

c) Learning outcomes that have reached the indicator of success as many as 6 people (20 %), so that who have not reached mastery as many as 24 training participants (80 %).

➢ *Cycle II*

The implementation of activities in cycle II refers to the reflection of cycle I, with the following steps:

1) The planning stage

At this stage the researcher prepares a learning kit consisting of lesson plans and tools, questions / worksheets and student activity observation sheets.

2) Implementation phase

This stage is the same as the implementation phase in cycle I. Widyaiswara acts as a teacher and acts as an observer. In the initial stage widyaiswara conveyed the learning objectives to the training participants. At this stage the emphasis is more on establishing more active group cooperation and emphasizing that each group ensures that all members of the group master the material being taught. The division of groups is still as in cycle I. Each group gets a task and conducts a discussion. The group leader shares the tasks with each member to find answers / information from various sources which will be discussed together to get answers in groups. Each group member must still be individually responsible for joint tasks, in addition to the group's responsibilities. This group discussion was given approximately 45 minutes. After finishing the discussion each group was asked to present the results of the discussion. Each group member is asked to be active in the presentation and answer questions from other groups. Each group presents the results of their discussion, the other groups must respond sequentially. During the implementation of the group discussion widyaiswara's tasks are motivating, encouraging, helping when there are difficulties from the group, and leading and organizing discussions so that the discussion remains directed and in accordance with the learning objectives. At the end of the presentation, the widyaiswara group gave praise / appreciation for the group's work. Based on the results of the training activity data questionnaire participants distributed in the second cycle obtained data as follows:

No	Active Category (%)	amount	Percentage
1 2 3 4	Very High (75 - 100) Height (50 - 74.99) Medium (25-49.99) Low (0 - 24.99)	30 - - -	100% - - -
The highest percentage of activity is 98.4 % The lowest percentage of activity was 81.25 % The average activity of the training participants is 91.6%			

Table 4:- Liveliness P Participants Training On Cycle II

In the second cycle the training participants' activities were all included in the very high category. The lowest percentage of activity was 81.25%, the highest percentage of activity was 98.4 %. The average activity of the training participants at the second cycle of 91. 6 %, meaning that the value of the average activity of learning is already above the indicator fortune learn that ≥80%. Thus in this second cycle, the training participants' activeness scores have all reached indicators of success.

In cycle II, the total learning outcomes of the training participants (100%) are in the range of values from 71 to 85. The highest learning outcomes score is 83, the lowest learning outcomes score is 72, the average learning outcomes score is 77.1. from the overall value obtained as many as 2 people (6.6%) of training participants whose values are still below the specified indicators, namely getting scores of 72 and 74. Thus 93.4% of all training participants in the second cycle succeeded in achieving the specified indicators, namely minimally obtaining 75 points.

3) Observation stage

From the observations after the improvement of activities by referring to the results of the reflection of the first cycle, there was an increase in the learning activities of the training participants. The observations of the second cycle learning process on the activity of the training participants seen by the 4C parameter indicate that the *Critical Thinking* skills are shown by the increasing number of training participants actively expressing opinions, input, expressing ideas and actively participating in group discussions. Participants in the training are actively looking for references used in group work so that the results of group work in stage II are far better than cycle I. In the group presentation presentation activities also appear to be more active, other groups provide input and responses.

To reinforce the data obtained on the results of observations in the second cycle, the researchers melakuk a n interview again with representatives of each group. Based on the results of the interview in the second cycle of cooperative learning implementation, the training participants felt they understood more and understood the cooperative learning process. This is indicated by the increasing enthusiasm of training participants in this second cycle. As the training participants' enthusiasm increased, the learning outcomes obtained also increased. In the second cycle, the training participants are getting used to cooperative learning, and can quickly adjust to themselves, especially during group assignments, where all training participants are active and responsible for the group assignments given.

4) Reflection stage

In the implementation of teaching and learning activities obtained information from the results of observation and evaluation as follows:

a) Many training participants have been seen to be active and serious in participating in learning activities;
b) Training participants are better prepared with cooperative learning methods;
c) Learning goes well by highlighting discussion, collaboration and collaboration between training participants;
d) Training participants are more active in their efforts to understand a training material;
e) Learning outcomes of training participants have increased.

➢ *Activity and Learning Outcomes of Training Participants*

Indicators of training participants' success are marked by increased activity and learning outcomes of training participants from cycle I to cycle II. The results of increasing training participants' activities from cycle 1 to cycle 2 can be seen in the following table.

No.	Stage	The highest score	Lowest Value	Average	Enhancement
2	Cycle I	90.6%	60.9%	78.6%	13.7%
3	Cycle II	98.4%	81.25%	91.6%	

Table 5:- Increased Training Participants' Activities

Based on table 19 it can be seen that there was an increase in the activity of the training participants from cycle I to cycle II by 16.%. In cycle I there were 8 training participants (26.6%) who achieved indicators of success and increased to 30 training participants (100%) who achieved indicators of success in cycle II.

No.	Stage	The highest score	Lowest Value	Average	Enhancement
2	Cycle I	76	41	63.8	13.7%
3	Cycle II	83	7 2	77.1	

Table 6:- Improving Learning Outcomes of Training Participants

Based on table 19 it can be seen that there is an increase in learning outcomes in cycle I to cycle II. In cycle I there were 6 training participants (20%) who achieved indicators of success and increased to 28 training participants (94.3 %) who achieved indicators of success in cycle II. The percentage increase in learning outcomes from cycle I to cycle II was 13.7%. Learning outcomes of training participants can be seen in the following histogram:

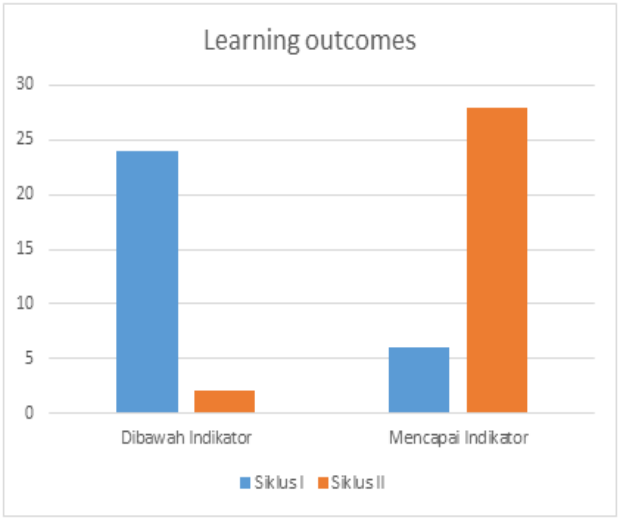

Fig 2:- Histogram of Student Learning Outcomes

V. DISCUSSION

Overall, the results of this study indicate that the application of the STAD cooperative learning model can increase the activeness and learning outcomes of PKS Training participants on the subject of basic education, because the learning process is more centered on training participants and emphasizes collaboration among training participants. Training participants actively try to find their own understanding of the training material through various sources, as well as through group discussions and class discussions. In addition, through cooperation in the learning process, it can automatically lead to good communication between the training participants, making the training participants more active and finally the process of concept discovery, understanding and finally mastering the concept can be facilitated.

Widyaiswara only interacts in groups when needed, so training participants are required to be active in learning. STAD's cooperative learning method requires training participants to learn together, help each other, work together, integrate new knowledge with existing knowledge, find their own understanding through discussion, exploration, explain, look for relationships and new ideas that arise in groups. Each group is responsible for ensuring that members of the group have mastered a course that is being studied.

The application of cooperative learning model type STAD is very suitable to be applied in PKS training in relation to honing individual abilities, giving broad opportunities to individuals, so widyaiswara can find out the learning weaknesses of each training participant. In addition, training participants not only accept what widyaiswara conveyed in learning, but provide opportunities for training participants to find concepts and understand the training material being studied. The benefits of using 4C skill patterns that form the

basis of cooperative learning will be very beneficial, especially in the real world of work where principals are proficient in using abilities in critical thinking, communication, collaboration and creativity in solving any problems that exist in the educational institution they lead.

VI. CONCLUSION

A. Conclusion

Based on the results of research in general can be concluded that the p Application of the learning model k ooperatif STAD type can improve the effectiveness of learning MCC training Force 18, which is characterized by increased activity and learning outcomes of the training of the first cycle to the second cycle.

Achievement of the average percentage of learning activeness of training participants in the first cycle was 78.6% and in the second cycle increased to 91.6%. The percentage increase in training participants' activity from cycle I to cycle II was 16.5%. The positive impact of the increased learning activeness of training participants is an increase in learning outcomes. The average value in the pre-cycle stage is 38, the average value in the first cycle is 63.8 and the average value in the second cycle is 77.1. The percentage increase in learning outcomes from cycle I to cycle II was 13.7%.

B. Suggestion

1. STAD cooperative learning methods can be used as an alternative method of learning in the classroom d iklat MCC which will be held next;
2. The need of holding a training p embelajaran k ooperatif to teachers / lecturers pengampu d iklat MCC, so teachers / lecturers are able to master and implement cooperative learning methods with good;
3. For uniformity of PKS Training learning patterns, cooperative learning methods can be considered to be PKS Training teaching methods and standardized in the Technical Guidelines for Strengthening Teachers as School Principals, so that there are uniform learning methods for all Training Institutions that will organize PKS Training;

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