

The Implementation of Collaborative Cooperative Learning Model of Fun N Pick and Pairs Compare to Improve Students Motivation and Learning Outcome in Subject of Economics

Yudianto

Graduate Program of Business and Management Education, Universitas Negeri Malang, Indonesia

Budi Eko Soetjipto

Department of Management, Faculty of Economics, Universitas Negeri Malang, Indonesia

Ludi Wishnu Wardana

Department of Management, Faculty of Economics, Universitas Negeri Malang, Indonesia

Abstract

Based on observations and interviews with teachers of economic subjects, obtained information that the motivation and learning outcomes of students in grade X of science programs are not optimal. Researchers have an alternative model of learning that can be applied by the teacher that is collaborative learning model Fan n Pick and Pairs Compare with the expectation to improve motivation and student learning outcomes. The purpose of this research is to know the implementation of collaborative learning model of Fan n Pick and Pairs Compare, the improvement of motivation and student learning outcomes after the application of cooperative learning model of Fan n Pick and Pairs Compare, and the problems that occur, and problem-solving in the implementation of the collaborative learning model in students grade X of science program. Every cycle in this research consists of planning, implementation, observation, and reflection. The result of this research is the application of collaborative learning model of Fan n Pick and Pairs Compare can be done well appropriate with the lesson plan. The learning model can increase students' learning motivation 6,58% in cycle I with an average success percentage of 79,06% and in cycle II about 85,64%. This learning model improves student learning outcomes by 19.44% in cycle I with an average success percentage of 70.83% and on the second cycle of 90.27%. One of the problems that occur in the implementation of collaborative learning model Fan n Picks and Pairs Compare is that many students who cheat to their friends while doing the test, the teacher should be more pay attention so that students are more discipline.

Keywords: collaboration cooperative learning, Fan n Pick and Compare Pairs, motivation, and learning outcomes

BACKGROUND

Education has a very important role to create a nation that is intelligent, peaceful, open, and democratic (Nurhadi, 2004). Therefore, reform in the field of education should always be done to improve the quality of national education, so as to improve the dignity and dignity of the people of Indonesia. The statement is reinforced by Zakiyah's (2002) opinion that "parents are the first and primary educators for their children because children receiving first education from their parents".

All this time the process of learning still using conventional strategy does not mean the conventional strategy is a bad strategy, but the development of any learning strategy should be continued to develop based on students need, considering the problems faced by students in learning is very conditional and complex. Such as information obtained after observation in MAN 1 Mojosari on 1 September 2016 and interviewed Mr. Jainul Mukhsinin as Economics subject teacher. The lessons are less motivating students and improve student learning outcomes. Remembering students are students from cross-interest such as students of science class, possibility tends to be bored and indifferent in following economic subjects. This is obtained from interviews with some students of class X of Science.

In the learning process of Economics subjects that teach to the students of class X of science, the results of the survey found by researchers that there are some problems in learning such as the average student knowledge less developed, the lack of encouragement in learning that makes them difficult in terms of information exchange. It also affects students' lack of thinking ability, lack of student interest in materials and less critical in responding to a topic in the subject matter.

This certainly has an impact on the attitude of student socialization is decreased, students seemed to learn with the system of individualism. There is no blend of arguments/opinions on the topics studied and the lack of an overall student discussion flow in the lesson. The lack of socialization has an impact on the difficulty of building a teamwork, whereas, in a learning system, a group or several students must be compact in a teamwork, have their own duties and responsibilities, exchange information and content to compete healthily with other students.

Understanding students can develop because cooperative learning that done appropriately with life in society for example by working together motivation, productivity and student learning outcomes will increase (Solihatin,

2008). In the implementation of cooperative learning model each member of the group has a positive sense of interdependence, thus triggering each member to always play an active role in the group (Tran, 2014). With this kind of circumstances cooperative learning can present interesting, meaningful, and challenging learning conditions which can then improve learning motivation so that learning outcomes increase (Andreas & Gabriel, 2010).

Frianto (2016) about The Implementation of Cooperative Learning Model Team Game Tournament and Fan-N-Pick to Enhance Motivation and Social Studies Learning Outcomes. The results of his research stated that cooperative learning model Team Game Tournament and Fan-N-Pick can improve motivation and learning outcomes. Fan and Pick is a model of learning by studying concepts based on how the brain maintains information that the human brain does not store information in neatly lined neuronal cells but is collected on nested branches of cells which, when viewed at a glance, will appear such as tree branches (Kagan and Kagan, 2009). With this learning technique students can exchange information between friends and if there is a difficulty then friends will always be ready to help in the group. The weakness in this model is that students who respond to answers tend to be only one student, so other students do not have the opportunity to respond or give an opinion, of course, the role of teachers is needed in overcoming the problem.

The research that conducted by Riyadi (2016) entitled "The Implementation of Cooperative Learning Model Fan-N-Pick and Quick on the Draw to Enhance Social Competence and Cognitive Learning Outcome for Social Studies" shows the that the application of cooperative learning model Fan-N- Pick and Quick on The Draw can help in improving a social skill and learning outcomes in social science students. Mustifah Research (2015) entitled "Application of Learning Model of Timed Pair Share and Fan-N-Pick to Improve Motivation and Learning Result of Social Science (Study on Class VIII B SMP GAYA Gedangan Malang)" stated that this learning model is feasible to use, this requires good classroom management because of the involvement of all students actively. The character of the Fan and Pick learning model that trains and directs students to solve new questions and understand the material through problem-solving that is still related to the taught material.

The model can be supported by the use of other models of learning that is Pairs Compare model, because this model is the teacher to ask questions on each pair, the pair compiled a set of answers/ideas, then the couples then pair up and compare their answers with other couples (Kagan and Kagan, 2009). Through this model the students will be moved to learn first before the teacher asks questions and if the students have answered the questions from the teacher, the students will share with other students in pairs, the students will get corrections from their friends if the answer is less precise and the students will gain additional knowledge from friend of his partner. The weakness of this learning model is that students who are less clever will have difficulty in following the learning path, the supervisor should monitor and provide the key answer to avoid the answer and accept the wrong understanding by the students.

RESEARCH METHOD

The approach used in this research is qualitative. This type of research is a classroom action research (CAR). Arikunto, et al (2012) defines the CAR is an action that has been planned to the learning activities in a class presence and role of the researcher is absolutely necessary for the field as an action planner, action executive, observer, interviewer, data collector, data analyzer, and author of research report. In this research the researcher is assisted by three observers, that is economics subject teacher and two colleague student of the State University of Malang, Department of Business and Management.

Research activities conducted by researchers on October - December 2017 that in the odd semester of the academic year 2017/2018 at Madrasah Aliyah Negeri (MAN) 1 Mojosari, school located at street Hassanudin 38 Mojosari Mojokerto regency. Related to the type of research that will be discussed that is related to students and learning activities, the subject of the research is the students of class X.

The number of class X study participants in MAN 1 Mojosari school consists of 11 study group, that are MIPA semester 1 and 2 programs 4 semesters amounting to 1, MIPA 1-4 and IPA 1-4 amounted to 4, while science 1 and religious 1 totalling 11 study group. The average number of students in 1 class is 30-35 students, the positive side is that the teacher is easier to manage the class with the number of students who are not too much. The school is also supported by LCD projector and other adequate learning facilities so that the teaching and learning activities in this whole school are going well.

Before conducting the research the first is an interview with Economics subject teachers. Based on the results of interviews with subject teachers on October 10, 2017, in teaching and learning process methods that have been used in the implementation of learning is a lecture method, discussion, question and answer, and the assignment or problem-based learning model. But in the dominant learning is lecturing.

In this research, the subject of research are students, teachers of economic subjects, and documentation. The data taken are teacher teaching activity data, learning activeness, and student learning outcomes. Sources of data used are Deputy Head of School curriculum, economics subject teachers, and students of class X program of science.

In data collection, the researcher uses several methods to obtain accurate data. Data collection in this research was done through interview, test, observation, documentation and field notes.

Each cycle in this research consists of planning, implementation, observation, and reflection. The research procedure in implementing collaborative learning model of Fan and Pick and Pairs Compare as follows.

CYCLE I

A. Stage 1: Implementing Plan

1. First Reflection

Researchers conducted interviews with economics subject teachers. Based on the results of the interview note that the liveliness and student learning outcomes are less than optimal. Researchers have a way to solve the problem is through the application of collaborative learning model of Fan And Pick and Cooperative Pairs Compare to improve student motivation and learning outcomes.

2. Planning

The things that should be done in the planning of implementation is to consult with the economic subject teachers to discuss the basic competencies to be used, prepare the lesson plan that will be used, prepare the test and test the test, prepare the observation sheet of teacher activity, observation sheet of student learning activeness, and field notes, as well as coordinating with teachers and peers related to the implementation of classroom action research.

B. Stage 2: Implementation

The things that researchers do at this stage is the researchers say greetings, presenting, apperception, and convey the purpose of learning and the scope of material to be studied. Students listen to explanations about the implementation of cooperative learning model of Fan And Pick and Pairs Compare. Researchers and students carry out learning appropriate with lesson plans that have been prepared.

C. Stage 3: Observation

Things that need consideration in doing observation is teacher activity and student learning activeness in learning activities.

D. Stage 4: Reflection

At this stage the researchers and observers discuss the conformity of teacher activity with a lesson plan, things that have been achieved or have not been achieved in the learning process, increasing the student activeness and learning outcomes.

CYCLE II

Cycle II is done with the intention to fix the deficiencies that occur in cycle I. Stage cycle II is the same as a cycle I. Only in cycle II is focused on the improvement of the cycle I.

RESULT

This research was conducted in 2 cycles. Each cycle consists of two meetings with time allocation (2 x 45 minutes) per meeting. The first cycle was conducted on January 30, 2017, and February 2, 2017. Cycle II was conducted on February 6, 2017, and February 9, 2017. To find out teacher activity using teacher activity observation sheets. The observation of teacher activity in cycle I and cycle II is presented in Table 1 below.

Table 1. Average Percent Success of Teacher Activity in Cycle I and Cycle II

Teacher Activity		
Cycle I	Cycle II	Increased
68,33%	96,67%	28,34%

To know the liveliness of student learning using observation sheet of student learning liveliness. Observation result of student learning motivation in cycle I and cycle II is presented in Table 2 below.

Table 2. Average Percentage of Student Motivation Success in Cycle I and Cycle II

Student Learning Motivation		
Cycle I	Cycle II	Increased
79,06%	85,64%	6,58%

Student learning outcomes are obtained from pretest and posttest scores to determine student learning outcomes before and after the implementation of cooperative learning model of Fan And Pick and Pairs Compare models. Comparison between student learning outcomes cycle I with cycle II can be seen in Table 3 below.

Table 3. Comparison between Student Learning Outcome Cycle I with Cycle II

Student Learning Outcome		
Cycle I	Cycle II	Increased
70,83%	90,27%	19,44%

DISCUSSION

Implementation of Collaborative Cooperative Learning Model Fan n Pick and Pairs Compare on Students Class X Program of Science at MAN 1 Mojosari

Implementation of collaborative learning model of Fan and Pick and Pairs Compare in the early stages of teachers say greetings and do presences. The teacher gives motivation and apperception. At the first meeting on cycle I the teacher applies the Fan and Pick a model and conveys the learning objectives and coverage of the material to be taught.

After the first stage done, continued with the core stage of group work. The researcher divided the students into 7 groups consisting of 4 students heterogeneously. This learning model begins with the researcher preparing the card containing the learning materials, each group playing a game card to respond to the questions that each student in the group will change roles. Student No. 1 holds questions cards and invites students no. 2 took one of the cards, after receiving the card. Student No. 2 read aloud and give the thinking time for 5 seconds. Then student No. 3 answer questions followed by the student No. 4, responds to the answers by clarifying the answers if they are wrong and agreeing to the answers if true, false, and correct, students No. 4 still gives praise and explanation when necessary and then re-summarizes the thoughts of the answers. The students changed roles, one person walking clockwise for each new round.

After getting the answer from the discussion, the "expert team" creates a summary or material summary sheet and returns to the home teams to teach the group members about the discussed material learned in the "expert team". After the group of experts finished drawing conclusions and explaining to their first group, researchers asked the students to collect the discussion result sheets for the group of experts that they had completed. Researchers also provide opportunities for other groups to ask if there are different and less obvious materials so that at the next meeting can create an interesting discussion.

At the second meeting, the researcher implementing the Pairs Compare learning model to the core activities of group work. Researchers make groups with members different from the previous group meeting. The researcher divided the students into 7 groups consisting of 4 students heterogeneously. This learning model begins with the teacher giving a question that has many possible answers and gives the thinking time. RallyTable is a partner beside it (A1 and A2) they keep the secret of the answers from other couples (B1 and B2). When the teacher declares that time is up, pairs compare is ready, it means that the pairs (A1 and A2) are paired using the RoundRobin technique (paired with B1 and B2) to check their answers.

Each of the pair counter others pair (A1 with B1; A2 with B2) adds the answer in the pairs reply list (answer pair A1 and A2) or checks if it is included in the answer list if they have completed it. The next stage is Team challenge: As a group, students give new answers on the list of answers (pair list), a New answer was obtained from the sharing with other couples (home teams). In this case, in the pairs, there is acting as a recorder and there is questioner who acted as interviewer other couples.

The implementation of collaborative learning model of Fan n Pick and Pairs Compare in cycle I still lack. Teachers have not been able to manage the class well. Because of it, researchers and observers decided to continue on cycle II. The average percentage of teacher activity success in cycle I was 68,33% with the very good category "A". While in cycle II average percentage of success rate 96,67% with the very good category "A". Teacher activity in cycle II increased by 28.34%. The result of observation shows that the deficiency in cycle I can be improved in cycle II. Radja et al (2017) research entitled "Implementation of Cooperative Learning Model Talking Chips and Fan-N-Pick in Improving Motivation and Learning Results of Social Science" also shows that the percentage of teacher learning implementation in cycle II increased to 81,87% and the implementation of learning by students increased to 83.43% with very good criteria.

Student Learning Motivation on Program of Science Class X at MAN 1 Mojosari after implementation of Collaborative Cooperative Learning Model Fan and Pick and Pairs Compare

In cycle I, student learning motivation is still not optimal. Motivation not only grows within the students but is also driven by the external motivation that is extrinsic motivation. This is in line with the statement Mamppease (2009: 3) which states that motivation can come from within or called intrinsic motivation and motivation that comes from outside or called extrinsic motivation. Students are still embarrassed or not confident in asking or expressing opinions, The result of observation of student's learning motivation in cycle I show average success percentage 79,06%. In cycle II, students are more confident in asking questions, answering questions, or expressing opinions. Socialization activities and teamwork on students are also good. Student learning motivation in cycle II has increased by 6,58%. The average percentage of success of student learning motivation in cycle II is 85,64%.

Student Learning Outcomes Program of Science Class X MAN 1 Mojosari after Implementation of Collaborative Cooperative Learning Model Fan and Pick and Pairs Compare

Sudjana (2006: 35) states that Tests are generally used to assess and measure student learning outcomes, especially cognitive learning outcomes regarding the mastery of instructional materials appropriate with educational and

teaching objectives. Increased motivation of students will also influence the increase of learning outcomes in line with Anggraini opinion (2013: 189) which states that high student motivation will have an impact on the acquisition of satisfactory learning outcomes. The test of the learning result given to the students as a reference whether the students have understood the material well or not.

The average score of student test on cycle I before implementing collaboration of learning model of Fan and Pick and Pairs Compare is 32,63. After Implementation Collaboration Learning Model Fan and Pick and Pairs Compare average student score increased become 70.83.

While on the second cycle average student test score before implementation Collaboration learning Fan and Pick and Pairs Compare is 75.69. After implementation collaboration learning model Fan and Pick and Pairs Compare average student score increased become 90.27.

Problems that Happen and Problem Solving in Implementation of Collaborative Cooperative Learning Model of Fan n Pick and Pairs Compare on Students Class X Program of Science at MAN 1 Mojosari

Problems that happen and problems solving in the implementation of collaborative learning model of Fan And Pick and Pairs Compare are: (1) noise at the time of group movement, should the teacher do more supervision and appeal or even give more assessment to student so that they will more discipline (2) some students still can not be disciplined in the discussion, should the teacher give attention to the students can also be given punishment with given questions about the material discussed, (3) students complain about the time that given by the teacher to finished material that discussion, teacher should be more carefully in manging time (4) there are still students cheating at the time of the test, the teacher should have more strict supervision during the test, and (5) the test material difficult to understand by students so that in making the sentence of the command must be clear do not contain a sentence of ambiguity.

CONCLUSION

The conclusion of this research that is: (1) The implementation of cooperative learning model of Fan n Pick and Pairs Compare can be implemented fluently appropriate with the lesson plan. (2) The implementation of cooperative learning model of Fan n Pick and Pairs Compare can improve students' learning motivation. (3) The implementation of collaborative learning model of Fan n Pick and Pairs Compare can improve student learning outcomes. (4) The implementation of collaborative learning model of Fan n Pick and Pairs Compare, there are some problems. One of the problems is the noise that occurs at the time of group movement, the teacher should be more pay attention to make students more discipline.

RECOMMENDATION

Based on this research, the suggestion that can give that are (1) For economic subject teachers, collaborative learning model can be used as an alternative to conducting teaching and learning activities. But should need attention in the management of time for learning to run fluently. (2) Students are expected to follow the learning in an orderly, active, and to be responsible. (3) For further research, it is suggested to be able to overcome problems that occur when implementing collaborative cooperative learning model of Fan n Pick and Pairs Compare.

REFERENCES

- Andreas, J. & Gabriel, J. 2010 Learning Mathematics with Understanding: A Cristical Consideration of The Learning Principle in The Principles and Standards for School Mathematics. *The Montana Mathematics Enthusiast*. 4 (1):103—114. Retrieved from <https://pdfs.semanticscholar.org/ffdd/7a94a47ca90df557af12c329d88398353b5b.pdf>
- Anggraini, V. D. 2013. Problem Based Learning, Motivasi Belajar, Kemampuan Awal, dan Hasil Belajar Siswa SMK. *Jurnal Ilmu Pendidikan*. 19 (2):187—195.
- Arikunto, S., Suhardjono, & Supardi. 2012. *Penelitian Tindakan Kelas*. Jakarta: PT. Bumi Aksara.
- 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 (IOSR-JHSS)*. 21 (5):71-84 .<http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2021%20Issue5/Version-7/I02105077481.pdf>
- Kagan Spencer, Kagan Miguel. 2009. *Kagan Cooperative Learning*. San Clemente, CA: Kagan Publishing
- Mamppeasse, M. Y. 2009. Pengaruh Cara dan Motivasi Belajar terhadap Hasil Belajar Programmable Logic Controller (Plc) Siswa Kelas III Jurusan Listrik SMK Negeri 5 Makassar. *Jurnal Medtek, Universitas Negeri Makasar*. 1 (2):55—66. Retrieved from https://www.academia.edu/21199458/PENGARUH_CARA_DAN_MOTIVASI_BELAJAR_TERHADAP_HASIL_BELAJAR_PROGRAMMABLE_LOGIC_CONTROLLER_PLC_SISWA_KELAS_III_JURUSA_N_LISTRIK_SMK_NEGERI_5_MAKASSAR
- Miftachudin, Budiyo, & Riyadi. 2015. Efektivitas Model Pembelajaran Two Stay Two Stray dengan Tutor

- Sebayu dalam Pembelajaran Matematika pada Materi Bangun Datar Ditinjau dari Kecerdasan Majemuk Peserta Didik Kelas VII SMP Negeri di Kebumen Tahun Pelajaran 2013/2014. *Jurnal Elektronik Pembelajaran Matematika*, (Online), 3 (3): 235, <http://jurnal.fkip.uns.ac.id/index.php/s2math/article/view/5912>
- Musfiqon. 2012. *Panduan Lengkap Metodologi Penelitian Pendidikan*. Jakarta: Prestasi Pustakaraya.
- Mustifah, M. 2015. *Penerapan Model Pembelajaran Timed Pair Share dan Fan-N-Pick untuk Meningkatkan Motivasi dan Hasil Belajar IPS (Studi Kelas VIII B SMP GAYA BARU Kecamatan Gedangan Kabupaten Malang)*. (Online) <http://karya-ilmiah.um.ac.id/index.php/disertasi/article/view/42298>
- Nurhadi, Y. B., & Senduk, A.G. 2004. *Pembelajaran Kontekstual dan Penerapannya dalam KBK*. Malang: UM Press.
- Radja, P.L., Soetjipto, B.E., & Amirudin A. 2017. Implementasi Model Pembelajaran Kooperatif Talking Chips dan Fan-N-Pick dalam Meningkatkan Motivasi dan Hasil Belajar IPS. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*. (Online), 9(2):1196-1201, (<http://journal.um.ac.id/index.php/jptpp/>), diakses 10 Juni 2017.
- Ramly. 2013. Pengaruh Model Pembelajaran Kooperatif Tipe Numbered Head Together terhadap Hasil Belajar IPS (Studi Eksperimen di SMP Negeri 1 Lasalimu). *Gema Pendidikan*, (Online), 20 (1): 84-86, (<https://gemapendidikanfkipuho.files.wordpress.com/pdf>), diakses 21 Oktober 2016.
- Riyadi, A., Soetjipto, B.E., Amirudin, A. 2016. The Implementation of Cooperative Learning Model *Fan-N-Pick* and Quick on the Draw to Enhance Social Competence and Cognitive Learning Outcome for Social Studies. *IOSR Journal of Humanities And Social Science (IOSR-JHSS)*. 21 (4):90-96. <http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2021%20Issue4/Version-1/L2104019096.pdf>
- Solihatini, Etin dkk. 2008. *Cooperative Learning*. Jakarta: PT. Bumi Aksara.
- Sudjana. 2006. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: P.T. Remaja Rosdakarya.
- Tran, D.V. 2014. *The Effects of Cooperative Learning on The Academic Achievement and Knowledge Retention. International of Higher Education*. 3 (2):132—141.
- Zakiah, D. 2002. *Ilmu Pendidikan Islam*. Jakarta: Bumi Aksara.