

# Application of the PAIKEM Method to Improve Learning Outcomes

Durotul Yatimah

Department of Community Education, Faculty of Education  
Universitas Negeri Jakarta  
Jakarta, Indonesia  
yatimahdurotul2018@gmail.com

Adman Adman

Department of Economy and Business Education Faculty  
Universitas Pendidikan Indonesia  
Bandung, Indonesia

Solihin Solihin

Department of Post-Graduate Biology Education  
Universitas Negeri Jakarta  
Jakarta, Indonesia

**Abstract**—Education is a benchmark for progress for a nation and state. Seeing this, various types of strategies and methods have been developed so that the concepts can be conveyed to students. One of them is the PAIKEM method. The purpose of this study was to determine the learning outcomes of students with the process of applying the PAIKEM method. The technique in the study uses the Technical Study Plan Technique with the Planning, Implementation, Observation and Replication phases with 2 repetitions. The sample in this study used a random sampling technique, with 10 Ganesha Education Pulau Gadung homeschooling students in East Jakarta. The instrument used in this study is a test and questionnaire. The results of this study stated that the value of the planning process was 90% in cycle I and II, it was good, 10% was enough in the first and second cycles. The process of learning outcomes of students gets a percentage value with a value of 90% both in cycle I and 95% in cycle II for the 7 indicators, and 2 indicators 10% enough in cycles I and II. This shows an increase in learning outcomes. The average percentage of technique in PAIKEM gets 90%. Then among the 9 indicators 3 out of 70% are stated as needed and 20% are quite appropriate. The value of this learning process measurement gets an average of 84%. Based on this data the application of the PAIKEM method to improve learning outcomes is very good.

**Keywords**—*learning outcomes; application of the PAIKEM method; lesson study techniques*

## I. INTRODUCTION

Education is one of the main and most important factors for the progress of a nation [1]. The progress of a nation is determined by the quality of education available. These advances are learned from the learning citizens as the nation's next generation who have experienced improvements both in the field of academy and behavior. The success of an education depends on how the teaching and learning process of students [2]. Of course, educators and teachers are required to be more creative in innovating in the learning process and methods for teaching. Educators as facilitators and moderators must

certainly be able to design effective, efficient, fun learning processes [3]. Based on a survey of 50 teachers, 85% of them still use conventional methods, so that the teaching and learning process takes place in a monotonous way without communicative relationships between students and education, even resulting in boredom when attending the teaching and learning process. This learning condition will certainly have an impact on the learning outcomes of students. Based on the results of the survey on Ganesha Education homeschooling through interviews with economic subject counselors. The average value of students is 63. This explains that the method used is not appropriate. One of the learning models that is capable of creating an effective, efficient, fun learning process, namely the PAKEM Method [4].

PAKEM is a learning model that relies on 4 principles, namely active, creative, effective and fun [5]. Active means that in the learning process the teacher must create an atmosphere such that students actively ask questions, question and express opinions or ideas. The active role of students is very important in the framework of creating creative generations that are able to produce something for the benefit of themselves and others. Based on these problems the researcher was interested in the research "Application of PAIKEM Method in Economics Subjects in the subject matter describes the role and spirit of entrepreneurship to improve learning outcomes of ganesha Education homeschooling students, Pulogadung East Jakarta.

## II. RESEARCH METHODS

The research method used is action research (Action Research) [6]. Action research outlines four steps, namely: 1) Development planning 2) Action 3) Observation 4) reflection. The study was conducted in two cycles where the second cycle was an action from the results of the first cycle reflection. The sampling technique used was random sampling technique so that 10 respondents were selected at the ganesha education homeschooling in Pulogadung, East Jakarta.

### III. DISCUSSION

The purpose of this research is to find out how far the learning outcomes of students towards learning are being carried out through the application of PAIKEM to determine the extent to which these objectives are achieved, the description of research data from each variable and the calculation of results empirically. Cycle I was held on Friday, April 13, 2012 and the cycle were held on Friday, April 20, 2012. Learning the PAIKEM Method Learning activities using the PAIKEM method were carried out at Homeschooling Ganesha Education, Pulogadung, East Jakarta. This learning activity was attended by 10 homeschooling students including 6 men and 4 women. The planning of action planning actions in this study is described in a structured manner and is explained in detail as follows:

- PAIKEM learning activities planned by all existing students at the schooling of Ganesha Education.
- Survey of the field where the learning activities will take place, identify the potential that can be utilized in the implementation of learning activities, and socialize in order to get information about the existing conditions in homeschooling
- Socialize the learning process using the PAIKEM method (active, creative, effective and fun learning) to parties whose curriculum along with directors are in schooling Ganesha Education who then designs together the learning process that will be carried out
- Preparing learning media in the form of modules made in power points and booklets
- Designing a PAIKEM learning process by researchers and observers, designing methods and data retrieval techniques in each cycle of action. Cycle I was held on Friday, April 13, 2012
- Design and establish observation techniques on learning using observation instruments and questionnaires.
- Evaluation to find out learning outcomes using test instrumental [6].

#### A. Implementation of Action

The suitability of the indicators shown from the table above reaches 90% as stated in the instrument checklist, so the goal of learning the PAIKEM method has been agreed between researchers and collaborators as well as students who will follow the research.

#### B. Logging Ide

The suitability of the indicator reaches 90% as stated in the instrument checklist, the goal of learning the PAIKEM method has been agreed between researchers and collaborators as well as students who will present the ideas in the PAIKEM method.

#### C. Stimulate Participants

In accordance with the indicators above, stimulating students reaches 90%, meaning that this indicator is in accordance with research planning.

#### D. Preparation of PAKEM Method

In accordance with the indicators above, the preparation of this group method is in accordance with the research plan.

#### E. Preparation of Material

In accordance with the checklist instrument indicator above, the preparation of PAIKEM learning material is in accordance with the percentage of 90%.

#### F. Learning

Indicator of the checklist instrument above that the sequence / learning process is in accordance with the percentage of 100%.

#### G. Instructional Media

The existing indicator match reaches 90% as stated in the instrument checklist, then the preparation of the PAIKEM learning media is appropriate

#### H. Preparation of Learning Evaluation

The suitability of the indicators shown reaches% as stated in the instrument checklist, so the preparation of evaluations from PAIKEM learning is appropriate

#### I. Preparation of Participants

The suitability of the existing indicators reaches 70% as stated in the instrument checklist, then the preparation of homeschooling students is appropriate.

#### J. Explaining the Material

The suitability of the existing indicators reaches 80% as stated in the instrument checklist, ma students explain the material accordingly

#### K. Improving Learning Results

The suitability of the items indicated in the instrument checklist, then the PAIKEM method can improve learning outcomes by a percentage of 90%. The suitability of the indicator whose achievement is 90% can be concluded that the material using the PAIKEM method can improve student learning outcomes.

#### L. PAKEM Method Learning Process

The learning process carried out includes data from PAIKEM learning activities where learning that goes according to what is expected to measure PAIKEM activities in the learning process measures success in learning. Some sub get the same score, among others are sub indicators about tutors explaining how to learn, making learning contracts, display of attractive methods, materials in the standard method are arranged systematically, the method of understanding makes it

easy to understand the material, the method of learning is interactive, and knowing the entrepreneurial material in accordance with grip method [7]. These seven components are components that get the same percentage value, of which 90% say they are good, 10% say enough. The average percentage of this component is 90% to reject the indicator. In the last indicator in the measurement of the standard method that has the same assessment as reporting the material that has been studied, the material given is in accordance with the learning needs, and knowing according to the method of measurement. These three components are components that get the same percentage value where 70% are stated to be good and according to needs, and 20% are stated to be quite appropriate. It can be concluded that the average value of the activity measurement method indicates 84% of learning activities by using the good method used in each learning.

#### *M. Measurement of Learning Results*

Measurement of learning outcome indicators in which there are several questions with the same assessment as the items about Tutors provide a solution when correctly answering each question about the material being studied, Tutors provide practical exams according to the material I have learned, Tutors give value to the results My study, Tutors monitor the learning outcomes that I do show the development of learning outcomes in entrepreneurial practice exam activities. There are 7 components of learning outcomes that are stated as good with an average percentage of 90% and expressed as a percentage of 10%. I have difficulty learning, Tutor In the last indicator in measuring learning outcomes from the standard method there are 3 assessments that are the same as working on evaluation questions at the end of learning activities, reporting the evaluation results to the tutor, the standard method can improve learning outcomes. These three components are components that get the same percentage value which is 70% stated to be good and in accordance with needs, and 20% stated to be sufficiently appropriate. It can be concluded that the average value of learning outcomes from learning activities by using the standard method states that 84% of learning outcomes from learning activities using the standardized method is good to be used in each learning because it can improve student learning outcomes.

Discussion of Field Findings Judging from the findings in the field where the question and answer activities were. The activity has the aim to educate students to give responses or answers to questions about entrepreneurship in order to develop thinking skills. Starting with training the participant question participants can be continued by explaining a little basic material about the power point company that has provided the role and entrepreneurial spirit before. Before explaining the material, the tutor provides an interesting booklet containing learning material as a substitute or addition to learning media in addition to the homeschooling module. Tutors explain about entrepreneurship occasionally asking students with the aim of measuring learners' knowledge about the material being discussed by the tutor given by After explaining the material then the tutor divides students into 2 groups, tutors explain how the entrepreneurial spirit through role playing. Through the explanation given by the tutor, assign

students to come forward to play a role with the theme of entrepreneurship with groups that have been distributed by tutors. The next activity the tutor provides questions to be done by students individually using the existing library at school. Then the tutor asks for the results of his work in writing and discusses it together [8].

The next activity is the tutor assesses the results of the work of the learning community and determines the average results of the work of the students with the group. Based on the results of the research conducted, after coordinating with the collaborator, it was decided that the implementation of PAIKEM had not been successful so that activities should be carried out in the next cycle. Observers observe the learning process to see the effectiveness of researchers in carrying out the learning planning steps that they have made. The implementation conditions were observed and recorded in the field notes to find out how much the learning outcomes of students in cycle 1. Evaluations were carried out in the form of performance tests and written tests. Tests were conducted to measure the success of the PAIKEM method implemented in improving the process of economic learning through PAIKEM by observing role playing directly in groups in groups to explore the role and spirit of entrepreneurship and the results of economic learning through test instruments provided by tutors 2. Description of Cycle II Research Results on this cycle is planned action research which is an improvement of deficiencies in the previous cycle, among others, as follows:

Provide direction to students who are less active in the learning process b. increase students' courage in asking questions by requiring learning citizens to ask questions at the second meeting c. Involving students in working on test questions during the learning process takes place d. Involving learning to creative people to develop entrepreneurship spirit 2nd cycle of the second meeting was held on Friday, 20 April 2012 [9]. In this research, researchers carried out planned activities and emphasized more on fieldwork activities that were in accordance with the learning process. The activity begins with prayer and apperception by tutors related to the preparation that will be carried out before learning. Prayer activities are one of the obligations that are carried out before starting learning [10]. The activity is carried out so that habituation given to learning citizens to foster discipline in themselves. Then followed by a question and answer activity, the activity has the aim to train the courage of the learning citizens to provide responses or answers to questions posed by tutors about entrepreneurship. They are trained to be able to develop their ability to think. The next learning activity was carried out almost the same as the previous meeting, Tutors were still discussing the rules, and the soul [11]. Entrepreneurship that was developed became even wider. Tutors from the work of citizens studying at the previous meeting of entrepreneurship. Tutors assign students to form for each group to sell so that they can deepen their souls and collect tasks. Discussing about groups, entrepreneurship after the selling activities are finished the tutor asks each group to explain and explain the field activities that have been assigned by the tutor. The tutor then provides a test to measure the level of understanding of the learning community. Within a specified time, the tutor evaluates and calculates the averages obtained

from the learning citizens in carrying out the assigned tasks and shows achievement so that the researcher considers that the research is successful. The data obtained in the implementation of cycle II actions are based on input from the research team. This is done in the form of improvements to cycle II. The improvement plan is focused on the questions that are considered to be lacking. Researchers formulate a new action plan. Improvement planning includes: (1) creating an action plan that is addressed to the role and spirit of entrepreneurship, (2) maximizing the implementation of the learning process through the implementation of PAIKEM which has not been achieved in the first cycle. The implementation of cycle I and cycle II are carried out through observation by the research team and observers. Increasing students' understanding of learning material through the application of the PAIKEM method in the learning process in groups and citizens learn to do tests individually to find out the data on the increase in learning outcomes of economic subjects 74 roles during the first cycle that is 77.5%. While the value of the individual economic test results that have been achieved in the implementation of the lowest cycle action is 50 and the highest value is 75 with an average value of 66 and a percentage of 66.96. From the results of the analysis of the action I can be obtained the implementation of the PAIKEM learning process through observations with 77.5% presentation and 65.5% test results seen not reaching the maximum between the processes obtained from the test results through the test instrument. Based on the findings of the learning process obtained several factors that cause low group learning outcomes are: (1). Environmental conditions that are less supportive in learning that makes learning citizens a little lazy in carrying out the learning process, (2). The use of teaching aids in homeschooling is less supportive, (3). In the learning process, the learning community is still rigid and afraid in asking questions and issuing opinions or ideas. While individual economic learning outcomes are still lacking, namely: (1). When working on a test tutor, there is no clear indication, (2), students are hesitant in working on the test instrument. Less effective learning conditions and less than optimal results are in accordance with the quality standards of every learning that requires 75% which is a reflection for researchers to improve teaching method.

#### IV. CONCLUSION

The technique in the study uses the Technical Study Plan Technique with the Planning, Implementation, Observation and Replication phases with 2 repetitions. The sample in this study used a random sampling technique, with 10 Ganesha Education Pulau Gadung homeschooling students in East Jakarta. The instrument used in this study is a test and questionnaire. The results of this study stated that the value of the planning process was 90% in cycle I and II, it was good, 10% was enough in the first and second cycles. The process of learning outcomes of students gets a percentage value with a value of 90% both in cycle I and 95% in cycle II for the 7 indicators, and 2 indicators 10% enough in cycles I and II. This shows an increase in learning outcomes. The average percentage of technique in PAIKEM gets 90%. Then among the 9 indicators 3 out of 70% are stated as needed and 20% are quite appropriate. The value of this learning process measurement gets an average of 84%. Based on this data the application of the PAIKEM method to improve learning outcomes is very Food.

##### A. Suggestion

(1). Tutors direct students in group work, (2). More props are added to facilitate the learning process, (3). Field work should be monitored so that all students are involved, (4). Tutors should motivate students to be interested in asking questions or arousing curiosity about learning material.

#### REFERENCES

- [1] Miftachul Huda, "IJER," vol. 3, no. 2, 2015.
- [2] Putu Dwila Yosiani, Wayan Lasmawan and I Made Candiasa, E-JPPUPGP, vol. 4, 2014.
- [3] Dino Sugiarto and Puji Sumarsono, "IJEE," vol. 3, no. 3, 2014.
- [4] Yul Alfian Hadi, N. Dantes and A.A.I.N. Marhaeni, "E-J PPUPG, vol. 3, 2013.
- [5] Syafrimar, "Suara Guru," JIPSS, vol. 2, no. 3, 2016.
- [6] Ayi Suherman, JPP, vol. 11, 2010.
- [7] S.A. Lawrence, JIAIE, vol. 4, no. 2, 2011.
- [8] Putra Hilmi Prayitno, "CARJ," vol. 1, no. 2, 2017.
- [9] Hilary Brown, "IJQM, vol. 3, no. 1, 2004.
- [10] Afrahmiryano, "JPDI, vol. 1, no. 2, 2016.
- [11] Yosef Kasa, "IJE, vol. 12, 2016.