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The Effectivity of Snowball Throwing Learning Model Viewed From the Activeness and the Achievement of Students at Vocational High School

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Abstract. The purpose of this research is to know the effectivity of snowball throwing learning model at Maintenance of Light Vehicle Engines Subject viewed from the activeness and the achievement of Students at Vocational High School. This research is a Classroom Action Research (CAR) and conducted in 3 cycles consisted of 4 stages; they are planning, action implementation, observation, and reflection. The subjects of this research were 30 students grade XI TKR A Vocational High School Pembaharuan Purworejo. The results of the research showed that: (1) Snowball throwing learning model is proven able to improve students' activeness. That can be seen from the improvement in every cycle; cycle I is 53,3%, cycle II 58%, and cycle III 68,8%. (2) The learning implementation by using snowball throwing learning model can improve the achievement of Grade XI TKR A students at Maintenance of Light Vehicle Engines Subject. It can be seen from cycle I, the number of students whose learning is complete 33,3%, while at cycle II is 62,5%, and at cycle III is 83,3%.

Keywords: Snowball; Activeness; Achievement; Student, Vocational high school.

1. Introduction

The law number 20 in 2003 states that education is a conscious effort and planned to create the learning that propel the students to be active in developing their own potency. Education aims to create the next generation with good quality in knowledge, behavior, skill, and have honor attitude and responsible in the effort of achieving prosperity which impacts on the prosperity of the family, society, even the country [1]. Therefore, education is very important in order to help in continuing a better life.

Indonesia places vocational education as part of National Educational System to prepare a high quality graduates. The graduates later can work at a company or work independently by becoming an entrepreneurs. Vocational education held in formal field and at high school level is Vocational High School (SMK). In order to support the development of Human Resources, the central government and regional government had done the efforts in enhancing the quality of education at Vocational High School. One of the problems faced in Indonesia education is the low quality of education in Indonesia.



The factors that cause the low quality of Indonesian education, one of them is because of the learning process at Vocational High School is not effective and not efficient. In Indonesia, its learning model is still dominated by verbal learning model (lecturing) and the learning process is still centered on the teacher or more popular known as teacher centered [2]. Causing, the students are less propelled to develop the thinking skill. The learning process in the class is just directed to students skill to memorize the information and they are not demanded to understand the information with its relation to the daily activities. Learning, in fact, is an interaction process towards all situation existed around an individual.

Based on the result of observation at one of Vocational High Schools in Purworejo, still there were teachers used lecturing model with only whiteboard as the learning media in explaining the lesson to the students. One of factors the teacher still uses this lecturing model is because they are lack of facilities in the class such as LCD, projector, or 3 dimension learning model. The usage of this conventional learning model causes the students less enthusiastic towards the learning until the students feel bored. Beside that, the learning model like this causes the teachers difficult to know whether all students already understand or not. It was proven, out of 30 students, less than 10 students were actively asking and answering the questions from the teachers in learning activities. The students chose to keep silent when given chance to ask or answer questions. Beside that, the results of their exam were still classified into low category. There were only 6 students could achieve the minimum passing grade (KKM) 75.00.

One of the efforts that can be done is by choosing the right learning model until the learning process in the classroom becomes pleasant. In a teaching learning process, two important components are teaching method and learning media. The selection of certain teaching model will affect the suitable type of learning media, even though there are still other aspects that must be considered in choosing the media, such as the learning purposes, environment, supporting facility, expected responses to mastered by the students after the teaching learning process, and students' characteristics [3]. Therefore, in determining a model, it must be matched with the condition.

Snowball throwing is one type of cooperative learning model. The selection of snowball throwing learning model is considered right, because this learning model can involve students' activeness through rolling game and then throw "the snow ball" or the paper. Beside that, this learning model will also dig students' creativity to write the questions and answers at once. In the meaning of this snowball throwing learning model propels the students to think and move actively during the learning process.

Based on the problem above, then Snowball Throwing Learning Model is necessary to Improve Students' Activeness and Achievement at Maintenance of Light Vehicle Engines Subject Grade XI TKR A at Vocational High School Pembaharuan Purworejo.

2. Research Method

This research was a Classroom Action Research. The research subjects were the students at grade XI Light Vehicle Engineering A Vocational High School Pembaharuan Purworejo. In this research, the observed variables were learning implementation with Snowball Throwing Method, students' activity during the teaching learning process, and students' achievement. The data collection method was by conducting test and observation. This was used to know which refers to cognitive field. During the learning activity, observation on students' activity was conducted by the observer, then there will be test after doing the teaching and learning process by using Snowball Throwing Method in order to know how far this method succeed. This research used achievement test instrument and activity observation sheet about the students' learning.

The achievement test instrument in the form of objective test with questions referred to the learning indicators. The achievement test aimed to see the students' achievement development. The test was conducted once in every cycle, which was after the action. The instrument students' learning activity observation sheet was used as the guidance in observing the implementation of learning process by the teachers, and students' behavior. Learning activity observation sheet contained positive and negative activity done by students in the class. At the indicator of observation sheet, the students' activities measured were about students' bravery in asking the question, answering the question/expressing their opinion, the interaction among the teacher and the students, students' interaction in group and students' attention during the learning process.

The technique used in analyzing students' learning activity was done by counting the number of students who asked and answered questions during the teaching learning process at cycle I, II, and III and then compared them. Towards the test data of students' achievement, an analysis was done by determining the average scores from the test, the progress from the test before the action and learning achievement test after the action at cycle I, II, and III, and also the number of students who completed the learning at cycle I, II, and III then compared them.

3. Results and Discussion

3.1. Results

3.1.1. Students' Activeness. The achievement criteria for students' learning activities is 65%. Snowball throwing learning model can increase students' learning activities if the percentage of students' activeness in the classroom in the amount of 65%. The result of students' activeness can be seen at Figure 1.

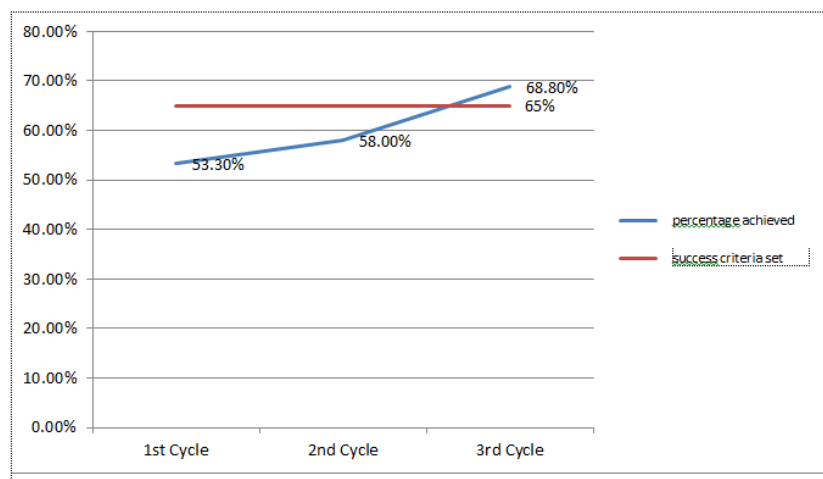


Figure 1. Students' Activeness in Snowball Throwing Learning

Based on the percentage above, it can be concluded that improvement on the activity is needed to be done at cycle 2 and then. At cycle I, students' activeness level still did not fulfill the stated criteria. After conducting the treatment towards the students, the score of students' activeness at cycle 2 was also still did not fulfill the stated criteria. Therefore, another treatment was necessary to improve students' activeness so that it can meet the stated criteria. The criteria of students' activeness was obtained at cycle 3 after doing treatment at the previous cycle.

3.1.2. Students' Achievement. The achievement at cycle I, II, and III by conducting treatment in the form of teaching learning process by using Snowball Throwing Method, after conducting the treatment, then achievement test was done at each cycle to see the students' achievement. The success criteria determined by the researcher was that if the completion score of the students reached 75% of the whole students at Grade XI TKR A. The data of students' achievement in each cycle can be seen at Figure 2.

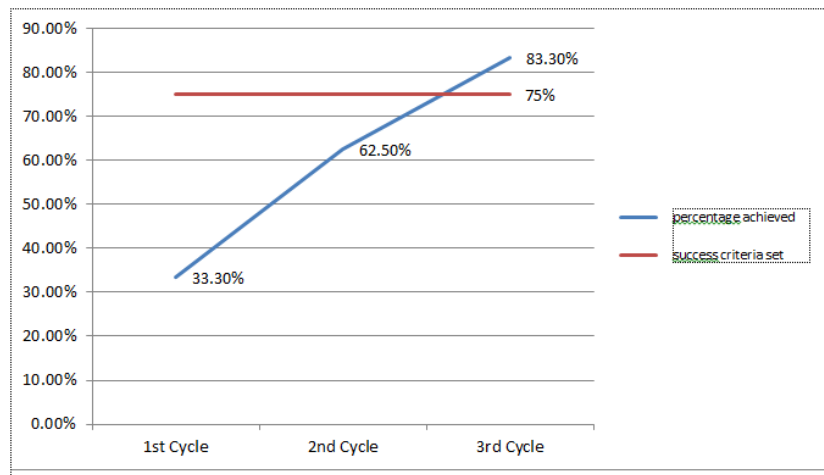


Figure 2. Students' Achievement at Snowball Throwing Learning

The students' achievement at cycle I shows that cooperative learning model snowball throwing type is not effective yet. At cycle II, students' achievement starts to increase, this is caused by students becoming more active in the learning process, however thoroughly the achievement still did not meet the completion. Until to continue to cycle III, a revision was felt necessary. The achievement at cycle III shows that students can reach the minimum completion criteria (KKM) in the amount of 25 students or in the mount of 83,3% out of the whole class. The snowball throwing learning model is proven capable in improving students' achievement.

3.2. Discussion

3.2.1. Students' Activeness. Students' activeness score at snowball throwing learning model is obtained through the observation sheet. The observation sheet uses numerical rating scale type. This type gives number from 1 – 5 by using remark less – very good at the columns of assessment aspects and limited classification. The assessment aspect being assessed at the students' activeness observation consisted of students' bravery to ask, students' bravery to answer the question, and the interaction between the students and the teacher, the interaction of the students in the group, and students' attention during the learning process.

The success of snowball throwing learning model for improving students' activeness is because of a well-done planning. Planning is a form of activity details about the action aims for achieving an improvement, betterment, or change [4].

At cycle I, students' activeness score did not fulfill the determined criteria. This is because the students are still unfamiliar with this snowball throwing learning model. Therefore, a kind of treatment is needed to overcome the obstacles at cyle I which is by making students' identity card. The purpose is to ease the researcher and observer especially in doing attitude observation. That identity card is in the form of a piece of paper in it written the number of

each students' presence number. That treatment is proven capable in improving students' activeness at cycle II. However, that activeness score still did not reach the determined criteria, this was because when it was the grouping, each student was mind to elect himself/herself as the chair of the group, until the researcher needed time to let the students discussed to choose the chairman of their own group. Therefore, a treatment is necessary for the next cycle. The treatment done at cycle III was the researcher gave additional time for each group to choose their chairman and the facilities and the researcher prepared the learning modules containing pictures. At cycle III, the materials being taught was reviewing all lessons that had been taught at cycle I and cycle II. The usage of pictures were meant to make the students easy in accepting information and remember it. At cycle II, the treatment done was successful showing the scores of students' activeness increased and achieved the determined criteria.

The research results showed improvement on students' activity with snowball throwing learning model increases at cycle II. Students' activity at cycle I in the amount of 75% and at cycle II in the amount of 20% becomes 97% [5]. This research accepts the initial hypothesis that has been formulated by the researcher which is; snowball throwing learning model is proven capable in improving students' activeness at grade XI TKR A at Maintenance of Light Vehicle Engines Subject at Vocational High School Pembaharuan Purworejo. Beside lack of students' activeness during the learning process, the problem appears at Maintenance of Light Vehicle Engines Subject was students' low achievement.

3.2.2. Students' Achievement. Students' achievement assessment in this research is by using a test. The test is conducted at the end of learning process or after the end of group discussion at snowball throwing learning model. That test is in the form of multiple choices containing 20 questions from four answer choices a, b, c, d, and e.

Students' achievement at cycle I shows that students' achievement is still low. It can be seen that less than 50% students of grade XI TKR A can achieve the minimum completion criteria (KKM). This is because the students did not pay attention on the lesson during the learning process. Therefore, the treatment is necessary at the next cycle which is by introducing snowball throwing learning method to the students so they become more interested in that learning model. At cycle II, it is proven that students' achievement increases, but still does not fulfill the minimum completion criteria. The usage of snowball throwing learning model in this research shows the improvement of students' achievement in each cycle. The success of snowball throwing learning model is achieved in cycle III, the improvement of students' achievement reaches 83,3% out of 30 students.

The achievement can be seen from the occurrence of changes in the perception and behavior included the behavior betterment [6]. At cycle II, the students seemed giving more attention and wrote the teachers' explanation carefully compared to the previous cycle. The change in that behavior is also seen in each learning cycle.

Based of the results of reflection on the previous cycles, when the students wrote the questions on a piece of paper, the questions written are generally the same. The students were not creative and tend to repeat the questions that had been written by other students. That questions predominantly only asking about the definition, and type of system components, and the conventional gasoline fuel. While at cycle III, the students' questions were more developed.

In this research, information delivery (teaching material) is not directly given by the researcher to all students, but through the chairman of each group that had been chosen by the group members. Thus, students' achievement is affected by materials delivery from the chairman of each group. The planning done so that the chairman of each group can deliver the teaching material well to their group members by giving the worksheet containing the pictures that will ease the explanation from the chairman of each group to the group members. The usage of media in this research is in the form of worksheet as the learning resources itself which is designed systematically in order to convey the information well to achieve the learning purposes determined beforehand.

The research results show the achievement of students' completion at cycle I in the amount of 35,48% and at cycle II in the amount of 90,32% [8]. This statement accepts the treatment hypothesis that has been formulated by the researcher which is this snowball throwing learning model is proven capable in improving the achievement of the students Grade XI TKR A at Maintenance of Light Vehicle Engines Subject at Vocational High School Pembaharuan Purworejo.

4. Conclusion

Based on the research results that the learning by using snowball throwing learning model is proven capable in improving students' activeness. This can be seen from the improvement in each cycle, which is at cycle I is 53,3%, at cycle II is 58%, and at cycle III is 68,8%. Beside students' activeness, the learning by using snowball throwing learning model also can improve students' achievement at Grade XI TKR A at Maintenance of Light Vehicle Engines Subject. This can be seen at cycle I, the number of students who completed the lesson is 33,3%, while at cycle II is 62,5%, and at cycle III is 83,3%.

Improving the activeness and the achievement of the students can be done through some stages, such as planning, action, and reflection. The planning stage is in the form of arranging the learning media and making evaluation instruments in the form of observation sheet and multiple choice questions. The action stage is in the form of snowball throwing model usage in the learning process. The reflection stage is needed to analyze the problems than the treatment done, until obtained the right plan for the next cycle. The planning for the implementation of a learning model is very important and need to be prepared well. If the planning has been prepared well, then there will be no obstacles in the implementation of the learning model.

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