

The Effect of Picture and Picture Learning Model with Scientific Approach towards the Outcomes of Economy Learning of Tenth Grade Students of Madrasah Aliyah Negeri Lubuk Pakam in the Academic Year of 2015/2016

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Abstract: The purpose of this research was to find out the outcomes of economy learning taught by using leaning model of Picture and Picture and scientific approach higher than the outcomes of economy learning with conventional method of class XIIS students of MAN Lubuk Pakam of the 2015/2016 academic year. This research was conducted at Madrasah Aliyah Negeri Lubuk Pakam, Karya Agung Street, Komp. Pemda Deli Serdang. The population of this research is all tenth grade students of MAN Lubuk Pakam with the 280 students in total who spread into eight classes. The sample was taken in two stages. In the first stage of class sampling, of eight classes, two were taken using cluster-sampling technique while in the second stage, of 73 students, 60 students were taken using random-sampling technique with 30 students for each class. The outcomes of this research showed that the outcomes of economy learning taught by using Picture and Picture learning model with scientific approach is significantly higher than the outcomes of economy learning which were taught using conventional method. This was proven by the outcomes of the analysis by using the testing of t which showed that tvalue = 5,67 and the value of ttable = 1,67 on the rate of significance of 5 % and dk = 58. Then, tvalue > ttable (5,67 > 1,67), this means that H0 was rejected and Ha was true. It can be concluded that the outcomes of economy learning of class X IIS students taught using Picture and Picture learning model with scientific approach is significantly higher than the outcomes of economy learning taught by using conventional method.

1 INTRODUCTION

Education is a conscious effort to grow the potency of human resource through the activity of teaching and learning process. The purpose of education is to create high quality human resource who is able to face the challenge in this globalization era. Until this time, the quality of education in Indonesia is relatively lower than that of other countries.

Education is one of the realization of culture of human that is dynamic and development laden. Because of that, the change or the development of education is something that is supposed to happen along with the change of life culture. The change in term of the improvement of education on every level needs to be continuously done as an anticipation of

future needs. Education that is able to support the development in the future is an education that is able to improve the learners' potency, therefore, those who are involved are able to face and solve the problem of their lives.

Teachers play an important role in the success of their students. The teachers do not only teach, but they also must have a conscious and critical attitude to make changes and improvements in learning. According to Raharjo (2012: 1) "A teacher acts as the manager of the teaching and learning process, acting as a facilitator who seeks to create teaching and learning conditions, develop learning materials and improve students' ability to listen to lessons and master the educational goals to be achieved". However, in reality, there are still teachers in learning process who always demand their students

to learn but rarely give lessons about how students should learn. In addition, there are teachers who demand the students to solve problems, but rarely teach how the students can solve problems.

Teachers only demonstrate the lesson to students without seeing the learning needs of the students. With the application of conventional methods by the teacher when delivering the learning material, it makes the students only wait for information from the teacher, students are less active, lack of interaction between the teacher and students and the learning process that is centered only on the teacher.

The same thing also happened in the class X IIS at Madrasah Aliyah Negeri Lubuk Pakam. Based on an observation, it could be seen the domination of the teachers that lessened the students' opportunity to involve actively in the learning process and it made the students less creative. The other students' activities were merely watching the teachers demonstrating the lesson and making notes about things considered as important. Regarding this matter, the teachers did not teach using a learning model that make the students easier to understand the lesson taught. It could be seen by the average score of the test of the students, which are far from the standard. Standard set by the school is 75 while the number of students of class X IIS 1 who passed the standard was only 13 students (37 %). Similar with that, while the number of students of class X IIS 2 who passed the standard in daily test I, II, III was only 14 students (37.8 %). Therefore, it can be concluded that students who managed to pass Minimum Learning Mastery Standard was only 30 % and 70 % did not manage to score above the Minimum Learning Mastery Standard.

The low learning outcomes of the school are thought to be influenced by several factors such as the lack of attention of students in the teaching and learning process because of the lack of learning motivation of students with conventional teacher teaching patterns, as well as the teacher's lack of knowledge about innovative learning.

To overcome these problems, various efforts are needed to overcome them. One of which is by applying innovative and constructive learning models in developing learning processes that are in accordance with the curriculum developed. One learning model that can be used as a way out of the problems that can be chosen to be applied in learning is Picture and Picture learning model with scientific approach.

With the implementation of the Picture and Picture model with the scientific approach, students are expected to be able to understand economic subject easily. Besides that, students are also expected to be more applicative because the teaching given is based on problems related to the real world

they experience and thus they can apply it in everyday life. This learning helps students process the information that has been formed in their minds and it arranges their own knowledge about their social life and their surroundings. With such learning, the knowledge gained will last longer and the benefits will become apparent.

This is supported by research conducted by Rahman (2012). The result of the study showed that there were significant differences in the outcomes of learning geography in the experimental class with control class. It was proven that the result of the analysis using the t test showed that the significance was 0.017. Therefore, the significance value is 0.017 < 0.05, then H₀ was rejected which means that there was a difference in experimental class learning outcomes compared to the control class with the use of the Picture and Picture model in the experimental class.

Based on the explanation above, the writer was interested in conducting research entitled "The Effect of Picture and Picture Learning Models with Scientific Approach towards the Outcomes of Economy Learning of Tenth Grade Students of Madrasah Aliyah Negeri Lubuk Pakam in the Academic Year of 2015/2016".

2 THEORETICAL STUDY

According to Shoimin (2014: 122) "The Picture and Picture learning model is a learning model using images that are paired or sorted into logical sequences". Therefore, the Picture and Picture learning model is a learning model that invites students to think logically and systematically using image media related to the subject matter displayed as interesting as possible in the form of cards and power points.

The use of this image media plays a very important role in the teaching and learning process as image media can facilitate student understanding and strengthen their memory. Picture media can also motivate learning and provide a relationship between subject matter and the real world. According to Levie and Levie (in Arsyad, 2013: 12) "the use of image media will produce better learning outcomes for tasks such as remembering, recognizing, recalling, and connecting facts and concepts. On the other hand, verbal stimuli gives more dividing results if learning involves consecutive memories.

Learning to use multiple senses (sight and hearing) based on the concept above is very much in accordance with the Picture and Picture learning model. Learning models like this will provide

benefits for students because students will learn more than material only presented in the visual stimulus or just audio stimulus. The use of the Picture and Picture model is able to contribute greatly to the success of the students' learning.

Picture and Picture learning model are not free from strengths and weaknesses. Picture and Picture learning model is an active, innovative, creative, and fun learning model. However, to choose the right material used in the Picture and Picture learning model is quite difficult, and the Picture and Picture learning model requires adequate facilities.

According to Hosnan (2015: 34), "scientific approach is a learning process designed in such a way that students actively construct concepts, laws or principles through observing stages (to identify or find problems), formulate problems, propose or formulate hypotheses, collect data with various techniques, analyzing data, drawing conclusions and communicating concepts, laws or principles found".

Therefore, scientific approach is an approach to learning that is carried out through various stages in which it requires high level of reasoning. The criteria of the scientific approach are said to be a learning approach because in the scientific approach the problem presented to students is a problem related to real life, so that students do not make guesses the answer to the problem, students are also expected to be able to think critically, rationally and be able to account for the conclusions obtained.

Hosnan (2015: 37) states that "the scientific approach in learning has steps, namely: 1). Observing, 2). Questioning, 3). Reasoning, 4). Trying, 5). Establishing networks for all subjects.

The conventional method or the lecture method is also called traditional learning methods because this method has always been used by the teacher as a learning method in the teaching and learning process. According to Hamruni (in Supriyono, 2013: 475), "the conventional approach is the approach applied by the teacher to the new students to the extent of providing knowledge or skills to the extent of knowing, not to putting the values of social and humanity insight and practical mastery of life provision."

According to Hasyim (2012), "conventional learning method is a learning method that emphasizes the process of delivering material verbally from a teacher to a group of students with the intention to make the students able to master the lesson material optimally".

Based on the description above it can be seen that learning activities are only teacher-centered. Therefore, the teacher has an important role in the learning process and students are the passive followers and recipients of one-direction learning. The role of teacher in this conventional model is not

only as a good facilitator and mediator, but also teacher has the learning authority.

Slameto (2010), "learning is an effort process carried out by individuals to obtain a new behavior change as a whole, as a result of the individual's own experience in the individual' sinteraction and environment".

Slameto (2010) "learning outcomes are the value of the overall activities of measurement, processing, interpretation, and consideration to make decisions about the level of understanding of students after conducting learning activities in an effort to achieve the learning objectives that have been set. The learning outcomes illustrate the progress, failure, and determine the type and level of difficulty of each student and the factors that cause difficulties when learning, if the learning is good, the learning outcomes can be affected." It can be concluded that learning outcomes are a level of mastery of students towards the lessons obtained by means of effort and tenacity both individually and in groups that are shown by the increase of the obtained value

3 RESEARCH METHOD

The population in this research is all the students of class X Madrasah Aliyah Negeri Lubuk Pakam of 2014/2015 academic year with the 280 students in total.

Sampling in this study was carried out in two stages. In the first stage of class sampling, two classes were taken from eight classes with cluster sampling technique. In the second stage the sampling for students from 73 students was taken by simple random sampling as many as 60 people (each class of 30 people), this was done to maintain the loss of samples.

Data analysis method in this study used Descriptive Analysis Method, Normality Test, Homogeneity Test, And Hypothesis Test. Descriptive analysis was used to determine the true state of the Picture and Picture learning model with scientific approach to economy learning outcomes. Normality test was used to find out whether the sample taken comes from a population that is normally distributed or not. The homogeneity test aimed to find out whether the data has a homogeneous variance or not. Testing the hypothesis to determine the effect of economic learning outcomes taught by the Picture and Picture learning model with a scientific approach is significantly higher than the economic learning outcomes that weretaught by conventional methods.

4 RESULTS

In the experimental class the treatment was given using a Picture and Picture learning model with scientific approach while in the control class were treated using conventional methods. Before given a treatment, both of the classes, at the beginning of the learning, were given a pre-test and at the end of treatment, a post-test was given. Therefore, it was obtained that the average score of the pre-test for the experimental class was 66.67 and the average score of the pre-test of the control class was 54.66, the average score of the post-test of the experimental class was 80.50 and the average score of post-test of the control class was 66.6.

For the normality test of the pre-test score of the experimental class $L_{value} = 0.1221$ and $L_{table} = 0.1617$ while for control class $L_{value} = 0.1535$ and $L_{table} = 0.1617$ distributed normally. For the post-test score of experimental class $L_{value} = 0.0905$ and $L_{table} = 0.1617$ while $L_{value} = 0.1224$ and $L_{table} = 0.1617$ distributed normally. In the homogeneity test of pre-test score $F_{value} = 1.43$ while $F_{table} = 1.85$. For the score of the post-test $F_{value} = 1.06$ while $F_{table} = 1.85$, therefore, it was obtained a conclusion that both experimental class and control class are homogen.

Based on the results of the analysis, research data showed that the data is normally distributed and the sample comes from a homogeneous population. With normal and homogeneous distribution, the results obtained in the study can represent the entire population. After conducting the the normality and homogeneity test of the data obtained from the result of the research, then hypothesis was tested.

From the conducted hypothesis test, it can be known that H_0 is accepted and H_1 is rejected. From the calculated hypothesis, it was obtained that $t_{value} = 5.67$ while t_{table} in $dk n_1 + n_2 - 2 = 58$ and real level $\alpha = 0.05$ is 1.67. Then, with predetermined criteria, there was a comparison that the outcomes of economy learning taught using the Picture and Picture learning model with with scientific approach was higher compared to students' economy learning outcomes taught using conventional methods on the subject of government economic policy.

Therefore, based on the research conducted at MAN Lubuk Pakam, the t test of the comparison of two independent samples matched, with significant level 0,05 it was obtained $t_{value} > t_{table}$, which is $t_{value} = 5,67 > t_{table} = 1,67$. This means H_a was accepted and H_0 was rejected. In other words, the hypothesis that says the outcomes of economy learning taught by using Picture and Picture learning

model with scientific approach is significantly higher than the outcomes of economy learning taught using conventional method for the students of X IIS class MAN Lubuk Pakam in the Academic year of 2015/2016 was proven

6 CONCLUSION

Based on the results of the research and discussion, it can concluded that the outcomes of economy learning taught by the Picture and Picture learning model with the scientific approach is significantly higher than the outcomes of economy learning taught by the conventional method of class X IIS Madrasah Aliyah Negeri Lubuk Pakam in the academic year of 2015/2016. This is proven by the testing of t where $t_{value} > t_{table}$ ($5.67 > 1.67$)

Based on the research conducted, the authors suggest that the teacher at school Madrasah Aliyah Negeri Lubuk Pakam use the Picture and Picture learning model and the scientific approach. The reasons are the implementation of the Picture and Picture learning model makes the material taught more directed, it makes the students capture teaching material more quickly, it also can develop students' reasoning power to think logically, learning is more memorable because students can observe the pictures directly prepared by the teacher.

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