Implementation of Peer-Teaching Learning Methods to Improve the Students’ Learning Outcomes on Features of Modern/Contemporary Art

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**ABSTRACT**
This study aims to improve the students’ learning outcomes on features of modern/contemporary art after being implemented peer-teaching learning methods. This study is a classroom action research that consisted of two cycles. Each cycle consisting of planning, implementation, observation, and reflection. This study was conducted on students of class XII IPS1 the second semester of the academic year 2018/2019 in SMA Negeri 1 Wirosari, Wirosari District, Grobogan. Variables of this study was consisted of: (1) the control variable is students of class XII IPS1 with total of 37 people that consisted of 12 boys and 25 girls; (2) the independent variable in the form of cooperative learning model of peer-teaching learning methods; and (3) the dependent variable is students’ learning outcomes. The data collection technique in this study was done by using the test in the form of a written assessment test questions do with the end of each learning cycle and non-test technique by using the observations, interviews, and documentation. The results showed that the average value of students’ learning outcomes has increased, this is evidenced from the increase of students’ learning outcomes of Pre-Cycle with the average of 68.16 increased in Cycle I after being implemented peer-teaching methods becomes to 76.61, and eventually could be increased again in Cycle II into 89.28.

**INTRODUCTION**

Education is one of the efforts to achieve the life of the nation. In the case of education learning process between teachers and students. The success of education is determined not only between teachers and students but also all the elements in it. According to Sanjaya (2007: 103), taught in the context of educational standards not only conveys the subject matter but also defined as a process set up the environment so that students learn. Another meaning of such teaching is often termed lessons.

Indonesian Government Regulation No. 19 of 2005 on National Education Standards, art, and culture not only contained in one subject. Culture encompasses all aspects of life, the cultural aspect is not
dealt with separately but are integrated with art. Arts subjects so that is basically a culture-based art education. One taught art education at the high school level is a fine art. Art is a branch of art that produced works of art in which the shape and the quality can be perceived by the human senses, especially the sense of sight and touch.

Arts Education are: (1) Multilingual, means developing the ability to express themselves creatively in different ways and media; (2) Multidimensional, meaningful development of diverse competencies include conception (knowledge, understanding, analysis, evaluation), appreciation, and creations by combining aesthetics, logic, kinesthetics, and ethics; (3) Multicultural, means that arts education to develop awareness and appreciation of the diverse cultural capability domestic and foreign.

Learning the art in SMA Negeri 1 Grobogan Wirosari still experiencing problems. Based on the evaluation and observation of researchers as a master of fine arts in class XII IPS 1 students of SMAN 1 Wirosari, the second semester in the academic year 2018/2019, students achievement on the material characteristics of modern/contemporary art show lower results. Proven on the initial conditions, the lowest value is 42, the highest score 85 and the average is 68.16 with the thoroughness of 37 students only 17 students (45.94%) who scored above a predetermined KKM is 72.

Learning the art in class XII IPS 1 SMA Negeri 1 Wirosari still developed conventionally, i.e. with an approach based on the activities of teachers and students just passively listen. This resulted in spirit and students' understanding of the subject matter is low. On learning, art tends teacher-centered classroom atmosphere (focus on the teacher) so that students become passive. On learning using a teacher-centered classroom atmosphere that does not require tools and materials practices, the teacher is explaining the concepts contained in the textbook or other references.

Researchers plan to carry out a research action to address the problems experienced by students through the implementation of learning methods of peer-teaching (learning among peers). This study aims to improve students' learning outcomes on features of modern/contemporary art of class XII IPS 1 in SMAN 1 Wirosari, the second semester in the academic year 2018/2019. In general principles that must be observed in active learning strategies derived from the principle of learning by Sumantri and Permana (2001: 101-102) are: (1) a student must learn on their own without the assistance of another person; (2) each student learning according to tempo (pace myself and every age group there are variations in the speed of learning); (3) a more motivated student when he was given responsibility for their own learning. Thus, someone students more easily receive information given by comrade others because of lack of a sense of reluctant or embarrassed to ask, such as those delivered Djamarah (2006: 12), that the learning process does not have to come from teachers, students can teach one another with other students, so that the significance of learning objectives can be achieved. In connection with the fine arts subjects, peer-teaching methods are needed that will encourage students to organize and describe what they have learned in addition to explaining the material to others. In addition, peer-teaching enhances social cohesion is self-students in learning activities. This technique is also an effective way to improve academic achievement for the tutor and tutee.

LITERATURE REVIEW

Learning
Based on Permendiknas No. 41 of 2007, learning is a relatively permanent change in one's personal capacity as a result of the processing of the experience gained and the practice is doing. Such changes can occur due to the interaction between individuals and communities of individuals with their environment so that they are better able to interact with their environment.

According to Hudojo (Sukardi 2015: 14-15), "Learning is an activity for everyone. Knowledge, skills, habits, interests, and attitudes are formed, modified, and growing due to learning". Therefore, a person is said to be learning when it can be assumed that a person happens a process of operations resulting in
a change in behavior. Soemanto still in Sukardi (2015: 16) argued that learning is seeking science or study. This opinion means that people have to gather the facts as much as possible.

Learning has special characteristics that learning is characterized by a changed behavior (behavioral change), there is change of behavior is relatively permanent, changes in its behavior should not immediately be observed during the learning process is ongoing, and the change in behavior is the result of the exercise or experience (Baharudin and Wahyu, 2007).

Learning Outcomes
Learning is a job usually done by people in general when people want to be able to do something. Basically, learning is a process that ended in the change. Learning never looked at anyone teaching, where it is, and what is taught, but more emphasis on the results of these learning; changes what happens after the learning (Sukardi, 2015: 13).

According to Sudjana (2004), the student’s learning outcomes is essentially the change in behavior that has passed through the learning process. Changes in the behavior of the ability of the students after learning activities to be the result of learning acquisition. The same is expressed in Slameto (2010: 2) which explained that learning is a process that attempts a person to obtain a new behavior change as a whole, as a result of his own experience in interaction with the environment. Thus the learning outcomes are the changes that occur in individuals after a learning experience.

According to Benjamin Bloom in Sudjana (2004), learning outcomes are divided into three parts: (a) Domains Cognitive domain with respect to the intellectual learning outcomes consists of six aspects, namely knowledge, memory, comprehension, application, analysis, synthesis, and evaluation. (B) Affective aspect, namely with regard to attitude. Some attitudes among others: (1) Attitude Honest. Honest attitude is seen in the words, actions, and deeds. (2) The attitude of Discipline. Discipline visible from behavioral habits orderly and obey rules and regulations. (3) Critical attitude. The critical attitude is seen in the habits of students seeking as much information as possible related to the field of study of the advantages-disadvantages, suitable or not, truth-whether or not and so on. (4) Attitude Research. The conscientious attitude is shown by calculation to perform an action or work. (5) The attitude of curiosity shown in the habit of asking about various things in accordance with the field of study. (6). Creative attitude. A creative attitude is seen in thinking and do something to generate a new way or the result of something that has been held. (7) Attitude responsibility. Responsible attitude is seen in the attitude and behavior of people to carry out their duties and obligations he should do to ourselves. (C) Psychomotor aspect, namely with regard to the result of learning skills and ability to act. There are six aspects of psychomotor domains, namely reflexes, basic movement skills, perceptual ability, harmony or precision, complex movement skills, and the expressive and interpretive movement. According to Slameto (2010: 54), factors that affect student achievement as expected, it is necessary to note several factors that affect student achievement, which is a factor Intern (intelligence or intelligence, interests, talents, and motivation) and external factors (situation family, state schools, and communities).

Art
The term of art was originally derived from the Ars (Latin) or Art (English) which means finesse. Some say the word art comes from the Dutch language, which means genius or a genius. While the art in the Indonesian word comes from the word meaning Sangsekerta worship. In traditional Javanese language, art means Rawit complicated work-intricate/small.

Iskandar believes that art is the result of emotion to be conveyed to others in the sense of community. Art is a spiritual activity that reflects reality in a work that form and content have to evoke certain spiritual experiences recipients. Art is all human actions arising out of a feeling and a wonderful nature, to move the soul of human feelings.
Art as a medium of expression is divided into five branches, namely:

a. Fine art is art that expresses through material media, paint (dye), lines and shapes.

b. Art music, the art expressed through the medium of sounds or voices.

c. Dance, media art expressed through the medium of body movement.

d. Literary arts, the art expressed through the medium of words and language.

e. Theater arts, the art expressed through the medium of words, movement, sound/voice, and likeness (a multimedia art).

Fine art is a branch of art that makes up a work of art by using media that can be captured by the naked eye and can also be felt or touched by the sense of touch. A person who creates a work of art that will excite an expression, beauty, love, and more that are showcased in a medium that can be viewed directly or be in touch. The elements contained in the arts is a dot, line, shape, form, space, color, texture, and light and dark (http://www.eduspensa.id/seni-rupa).

Peer-teaching (Tutor Peer) Learning Methods

A learning method is a form of learning which is reflected from start to finish typically presented by the teacher in the classroom. In teaching methods are student competency attainment strategies with approaches, methods, and techniques of learning. The learning methods have a wider meaning than the strategies, methods or procedures of learning.

Peer-teaching learning methods (peer tutoring) is a group of students who had completed learning materials and provide assistance to students who have difficulty in understanding the materials lesson learned. One or several students appointed by the teachers, to help teachers in the guidance of their classmates. By learning to use the peer tutoring system, will help students who have not reached the minimum value completeness criteria (KKM), or less quickly receive lessons from teachers (Herianto, 2010: 2).

Peer tutoring is known as peer learning or providing learning between students or students. This can happen when students are better able to complete their own work, and then help other students, who are less able. This is a strategy to support teaching fellow students in the classroom. This strategy puts the entire responsibility of teaching to all members of the class (Herianto, 2010: 9).

Peer tutoring and peer assessment is the easiest solution and the solution in the face of obstacles in machine learning, especially in schools that do not have adequate infrastructure, lack of teaching staff, the number of students in class is very large, and funds are limited. Learning to harness peer tutoring and peer assessment was able to optimize computer learning, which in turn will improve the students' competence in accordance with the demands of today (Arikunto, 2006). Learning model of peer tutoring in small groups to improve student learning outcomes in which all students are active, students are very enthusiastic in carrying out the task, all brave task group representatives in front of the class, the students dared to ask the students taught and the response is very high (Riyanto, 2009).

Peer tutoring is a group of students who have already completed towards learning materials, provide assistance to students who have difficulty in understanding the materials lesson learned. Help learning by peers can eliminate the awkwardness. Language peers are easier to understand, but that with peers no reluctance, low self-esteem, shame, and so on, so it is expected that students who do not understand do not hesitate to reveal the difficulties faced (Sardiman, 2005). Peer tutor is someone or some of the people with students designated by the teacher as a helper teacher in guidance to classmates. By learning system using peer tutors will help students whose value under the KKM or less quickly receive lessons from teachers among subjects. The tutor can be accepted (approved) by the students who received the repair program so that students do not have fear or reluctance to ask him. Tutors can explain repair materials needed by students who receive a repair program. Tutors have enough creativity to provide guidance, which can explain the lesson to man. The model tutorial is a way of delivering learning materials that have been developed in the form of modules for students to learn.
independently (Sardiman, 2005), which may explain the lesson to man. The model tutorial is a way of delivering learning materials that have been developed in the form of modules for students to learn independently (Sardiman, 2005), which may explain the lesson to man. The model tutorial is a way of delivering learning materials that have been developed in the form of modules for students to learn independently (Sardiman, 2005).

A step-by-step method to teach their peers (peer-teaching methods):

a. Educators explain topics, learning objectives, and steps/activities that will be passed by the participants

b. Dividing participants into groups of 4-5 participants evenly (each group of participants who are smart)

c. In the group of participants to learn from and with peers in a way that mutually beneficial and sharing of knowledge, ideas, and experience of each.

d. Each member of the group is required to respond as well as their own opinion which will be united in one conclusion.

e. Each group summaries of the discussions in the conclusion on the basis of mutual agreement.

f. A few minutes later (about 20 minutes) one member of each group, in turn, teach the findings in the presence of other groups.

g. Each group was asked to provide feedback (criticism, suggestions, opinions, questions, comments, etc.)

h. The disagreements are discussed until the problem is solved

i. Each new problem noted by teachers and given a solution

j. The teacher gives conclusions to problems and solutions so that a uniform understanding of each participant.

k. The assessment carried out by the teacher during the learning process is underway (especially in step 3).

**METHODS**

Subjects in this study were students of class XII IPS1 SMA Negeri 1 Grobogan Wirosari, the second semester of the academic year 2018/2019, amounting to 37 that consisted of 12 boys and 25 girls with an average age of 17 years. The focus of the research was the activity and student learning outcomes in learning by using the methods of peer-teaching. The subject of this research with the premise that students in class XII IPS1 potential academic ability were quite good based on the value of daily tests and involvement of teachers in the learning process was quite good, but still individual learning styles, so it is expected to use learning of cooperative learning methods of peer-teaching will improve students' active learning and student interaction in group work that will ultimately improve student learning outcomes. In the study of this school action steps that will be passed is as follows in Fig 1.

In this classroom action research, data collection methods were of two kinds. The first technical test was a way of collecting data by delivering test results to learn art and culture at the end of each learning cycle by applying the peer-teaching methods, the value obtained from the students' cognitive assessment. Second, the non-test techniques, namely observation, interviews, and documentation.

In this research, there are two data, namely the qualitative and quantitative data, then this study was by using a comparative descriptive analysis. The analysis was done by comparing the performance of teachers in the Pre-Cycle, the first cycle and the second cycle, and personal reflections of each cycle.

To validate the data could be used in many ways. Data valid test that could be done by arranging to grate. Because in this school action research data was acquired through observation with the observation sheet, it included data validation content validity, the validity of the construction, and the validity of the measure.
The performance indicators in this study were determined based on the minimum completeness criteria used on the subjects of art and culture class XII IPS1 SMA Negeri 1 Wirosari, the second semester of the academic year 2018/2019. Students are said to be complete learn individually if it has reached a value of ≥ 72 with numbers of achievement at least 85% of all students.

RESULTS AND DISCUSSIONS

Results

1. Pre-Cycle

Based on results of preliminary observations carried out by the researchers as teachers of Arts subjects in class XII IPS1 SMA Negeri 1 Wirosari, District Wirosari, Grobogan, obtained an initial image that the learning methods that used is still not effective, so that active students in following the activities, not optimal learning, students are still hesitant in completing the task, this has an impact on learning outcomes for arts obtained students still low. Especially on the features of modern/contemporary art. From of 37 students, only 17 (45.94%) students who have scored more than minimum completeness criteria (KKM), which has been determined in the amount of 72, it means that there are still 20 (54.06%) of students who are incomplete for this need to be improved in Cycle I learning activities. For more details as illustrated in the following Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Achievement</th>
<th>Pre-Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Lowest Value</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>The Highest Value</td>
<td>85</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete</td>
<td>54.06%</td>
</tr>
<tr>
<td>4</td>
<td>Complete</td>
<td>45.94%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>68.16</td>
</tr>
</tbody>
</table>

2. Cycle I

In Cycle I have been conducted research actions through the implementation of peer-teaching. From the analysis of the formative test results of Cycle I showed an increased value compared to Pre-Cycle, from 37 students, already 24 students (64.86%) who have scored more than KKM, which has been determined in the amount of 72, and there were only 13 students (35.14%) were not completed,
although there has been increased, the results have not yet reached learn completeness indicator, for it needs to be improved in Cycle II learning activities. This is still less than the optimal impact on the learning outcomes of students, which can be seen in Table 2.

<table>
<thead>
<tr>
<th>No.</th>
<th>Achievement</th>
<th>Cycle I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Lowest Value</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>The Highest Value</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete</td>
<td>35.14%</td>
</tr>
<tr>
<td>4</td>
<td>Complete</td>
<td>64.86%</td>
</tr>
</tbody>
</table>

Average 76.61

3. Cycle II

In Cycle II has been conducted research actions through the implementation of peer-teaching. Based on the analysis of the formative test results of Cycle II showed an increased value compared to the Cycle I, the learning outcomes of 37 students, there were 33 (89.19%) students who have scored more than KKM which has been determined in the amount of 72 and only 4 (10.81%) students who do not complete, although there are still students who have not yet reached KKM, but an indicator of learning completeness of students has been reached, so that the study was discontinued for the next cycle. It had a positive impact on the learning outcomes of students, which can be seen in Table 3.

<table>
<thead>
<tr>
<th>No.</th>
<th>Achievement</th>
<th>Cycle II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Lowest Value</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>The Highest Value</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete</td>
<td>10.81%</td>
</tr>
<tr>
<td>4</td>
<td>Complete</td>
<td>89.19%</td>
</tr>
</tbody>
</table>

Average 89.28

Discussion

Based on the results of research on the Pre-Cycle, Cycle I and Cycle II that has been described above, the success of each cycle can be seen in Fig 2.

![Fig 2. Data Comparison of Improvement Students’ Learning Outcomes in Pre-Cycle, Cycle I, and Cycle II](image-url)
Through the implementation of peer-teaching learning methods can be known on the initial conditions of 37 students, only 17 (45.94%) students who have scored more than KKM which has been determined in the amount of 72, it means that there are 20 (54.06%) students who did not complete, then made repairs in Cycle I by using peer-teaching learning methods of 37 students, had 24 (64.86%) students who have scored more than KKM which has been determined in the amount of 72, and only 13 (35.14%) students who did not complete. Then proceed further improvement in Cycle II by reapplying the peer-teaching learning methods of 37 students, a total of 33 (89.19%) students who have scored more than KKM which has been determined in the amount of 72, it means only 4 (10.81%) of students are still incomplete, but the performance indicators in this study have been met, so it is not passed on to the next cycle.

Based on the results of preliminary observations on the Pre-Cycle to determine the action research, the results of research that have been done in Cycle I and Cycle II showed an increase in the students’ learning outcomes. It is evident from the increase of the students’ learning outcomes in the Pre-Cycle amounted to 68.16 increased in Cycle I after being implemented peer-teaching methods be 76.61, and eventually could be increased again in Cycle II into 89.28. Thus the implementation of peer-teaching learning methods in the learning process can motivate students so that the students’ learning outcomes on features of modern/contemporary art can be improved.

CONCLUSION AND SUGGESTION

Conclusion
Based on the results of learning improvements that have been implemented can be concluded that in the Pre-Cycle of 37 students, only 17 (45.94%) students who have scored more than KKM, in Cycle I is done by using peer-teaching learning methods of 37 students, had 24 (64.86%) students who have scored more than KKM, and in Cycle II by reapplying the peer-teaching learning methods of 37 students, a total of 33 (89.19%) students who have scored more than KKM. In Pre-Cycle, the average of students’ learning outcomes of 68.16 increase in Cycle I after being implemented peer-teaching learning methods becomes 64.86, and eventually could be increased again in Cycle II into 89.28. Thus, the implementation of peer-teaching learning methods on features of modern/contemporary art can improve the students’ learning outcomes.

Suggestion
Based on the results of the implementation of classroom action research that has been carried out, the advice that can be used for further research as follows:
1. In performing the learning activities should a student to hone all aspects of that was in him. So not only sharpen cognitive abilities, but also psychomotor, and attitudes.
2. Teachers should familiarize themselves apply active learning methods and innovative so that students are actively participating in the learning activities so as to improve the understanding, liveliness, and the learning outcomes of students.

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