The Improvement of Science Learning Outcomes and Intrapersonal Intelligence Through Course Review Horay of Third Grade Students at MI Mazra’atul Ulum 01 Lamongan

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This research was conducted because the learning process is lack of student’s enthusiasm and passionate, it tend to be not interested learning. The previous student learning outcomes were only 13% who reach the minimum completeness criteria. Learning so far has used the lecture method so it is necessary to apply a course review horay strategy. This research was conducted at MI Mazra’atul Ulum 01 Lamongan. The method used in this research is classroom action research which consists of 2 cycles, each cycle through 4 stages, namely planning, implementation, observation, and reflection. Data obtained through interviews, questionnaires, worksheets and documentation. Data on student learning outcomes were analyzed by SPSS to determine the increase in students learning outcomes and intrapersonal intelligence in each cycle. The results showed that: (1) The implementation of the course review horay strategy has done well because it is able to increase the activities of teachers and students. In the pre-cycle teacher activity has a percentage of 58% (less), cycle 1 has a percentage of 71% (good), and cycle 2 has a percentage of 73% (good). In the pre-cycle student's activity has a percentage of 42% (less), cycle 1 has a percentage of 58% (less), and cycle 2 has a percentage of 83% (good). (2) Data on student learning outcomes in the pre-cycle has a percentage of 13% with an average of 48.8 (less), in cycle 1 got a percentage of 94% with an average of 78.2 (good) and in cycle 2 got a percentage of 94% with an average 78.6 (good). (3) Intrapersonal intelligence in pre-cycle has a percentage of 40%, cycle 1 has a percentage of 88%, and cycle 2 has a percentage of 96%.
INTRODUCTION

The Minister of Education and Culture supports the study of the basic concepts of Natural Science subjects in Number 57 of 2014 Article 5 Paragraph 2 that Natural Sciences aims to develop attitudes, knowledge and skills competencies as the basis and strengthening abilities in life, society, nation and state. This is reinforced by Mulyasa’s opinion which explains that Natural Sciences is a subject that is not only mastery of understanding abilities in the form of facts, concepts or principles but also a process of discovery. Science education is expected to be a means for students to learn about themselves and natural environment as well as prospects for further development in scientifically application of daily life (Mulyasa, 2007). From these two understandings, it can be concluded that the basic concepts of science learning are subjects developed by noticing the achievement of knowledge, attitudes, and skills through the process of observation and thinking logically and systematically to understand all forms of events that exist in the universe and others.

Two factors affect the achievement of learning objectives. The first is student factor which they tend to lack understanding about learning in characteristics of living things chapter. That because some studies in learning the strategy used was asked students to listen so students tend to be bored and difficult to understand the material delivered. In addition, students are also less confident in answering the questions given. The second factor is teacher factor, which used to apply lecture method in learning.

This problem is very crucial to be solved. Researcher determined the course review horay strategy as an alternative to improve intrapersonal intelligence and student learning outcomes in the learning process. In the book “Cooperative Learning” by Agus Suprijono that the course review horay strategy is part of cooperative learning which advantages can create conditions of student’s participation through an interesting games or entertainment by shouting “Horay” (Suprijono, 2014). In this study, researcher used the course review horay strategy because students were more understand and easier to remember also, they became more confident to answer the questions.

Some of previous studies that are relevant and strengthen the results are those carried out by I Wayan Romi Sudhita (2015) in class II SDN Banyuasri entitled "Application of the course review horay learning model with snakes and ladders to improve student learning outcomes in subjects Mathematics of Class II Elementary School Students".

The results of the research at SDN 4 Banyuasri on January 19th, 2015 obtained the following results; 1) the activities provided by the teacher during the learning process are monotonous, causing a lack of enthusiasm for students in participating during learning process, 2)the strategy is using the lecture method and lacking of using learning media, 3) student activity in learning process is quite low. Students lack self-confidence so they tend to be silent a lot. Student's score reached only in average of 64.36, which means still reached under the minimum completeness criteria.

Based on the background, researcher conducted a study entitled “The Improvement of Science Learning Outcomes and Intrapersonal Intelligence Through Course Review Horay of Third Grade Students at MI Mazra’atul Ulum 01 Lamongan".
METHODS

The research uses method of Classroom Action Research (CAR) carried out by observing the learning process in the classroom. The subjects observed were all activities carried out by teachers and students during the learning process. The place of conducting research was MI Mazra'atul Ulum 01 Lamongan. Research subjects were 31 students of class III. Implementation was carried out on third grade students of MI Mazra'atul Ulum 01 Lamongan.

The qualitative approach in this study was used with the following considerations:
1. Clarity of elements, research subjects are third grade students of MI Mazra'atul Ulum 01 Lamongan. Data source is flexible, meaning that the results of the first study are not always the same as the second research.
2. Research steps, only known steady and clear after the research is completed.
3. Research design is flexible with unpredictable steps and outcomes.
4. The data collection was carried out by the researcher, because the researcher as a human instrument collected data from interviews, questionnaires, and observations of learning activities in the classroom.
5. Data analysis was carried out concurrently with data collection.

This classroom action research was carried out in 2 cycles. Each cycle was carried out by the following procedures of planning, action, observation and reflection. The instruments used in data collection are: Observation, Interview, Questionnaire, and Written Test.

Data Analysis
1. Validity

A test has high validity if the score obtained has a high correlation with the total score so that the product moment correlation is used with the formula (Wakhidah, 2016):

\[
r = \frac{\Sigma xy - (\Sigma x)(\Sigma y)/N}{\sqrt{\left(\Sigma x^2 - (\Sigma x)^2/N\right)\left(\Sigma y^2 - (\Sigma y)^2/N\right)}}
\]

Which;

- \( r \) = correlation coefficient (item test validity)
- \( N \) = Number of students doing the test
- \( x \) = obtained score
- \( y \) = total score
- \( \Sigma x \) = number of \( x \)
- \( \Sigma y \) = number of \( y \)
- \( \Sigma xy \) = number of \( x \) and \( y \) multiplication

To simplify the calculation, validity was carried out by using SPSS 16.0. After entering the data into the SPSS 16.0, researcher then analyze the construction validity. It was claimed to be good if the correlation of each factor was positive and \( \geq 0.3 \) (Sugiyno, 2012).

2. Reliability

The reliable instrument produces consistent measure even though it is used to measure i many times. A good test is to have a high reliability, meaning that it has a consistent value if it is used many times and the value is relatively the same. Nur Wakhidah cites Mehrens and Lehman's book which states that the reliability of the description can be estimated using the alpha coefficient formula developed by Cronbach. The reliability calculation uses the SPSS 16.0 as well. If the result has a reliability coefficient of more than 0.4 then it is said to be reliable. If the Cronbach's Alpha value is less than 0.600, it means it is bad. If a value of about 0.700 is accepted and more than equal to 0.800 is good. From this qualification we know that the value obtained from the pre-cycle is bad.

Individual performance indicators are said to be successful if they reach the Minimum Completeness Criteria of 75 and
classical performance indicators are said to be successful if 80% of students reach the Minimum Completeness Criteria. So, if there are 31 students in the class, then 80% who reach the Minimum Completeness Criteria (KKM) must be 25 students.

RESULTS AND DISCUSSION

The use of course review horay strategy on grade 3A students at MI Mazra’atul Ulum is the first research. The previous learning process only used material in books or supporting books. The results of the learning process that relied on books alone did not change and the learning outcomes tended to be low.

Pre-Cycle

At this stage, researcher observed the learning process at MI Mazra’atul Ulum. Researcher conducted interviews with teachers of Natural Sciences of Class 3 A and distributed questionnaires to class 3 A students to be filled. In the research process, researchers observed the surrounding conditions in the learning process from student activities, student learning outcomes and teaching methods. In pre-cycle stage, the researcher observes that the learning process carried out by the teacher, uses lectures in delivering materials, so that students experience a state of boredom because they only listening and sit quietly. The lesson is difficult, therefore researcher conduct research based on existing facts and make learning became more fun to make the material easy to understand.

The data from this observation were taken from observations before and after the implementation of the course review horay strategy. The researcher held a pre-cycle first as an act of field inspection. Pre-cycle is a pure learning activity carried out by natural science teacher in class 3A on the material characteristics of living things. Before the action was carried out by the researcher, this stage was used as a benchmark for comparison before there was action and after the implementation of the course review horay strategy.

The results of the pre-cycle showed that only 4 students have achieved the minimum completeness criteria of 75. The results of teacher activity obtained a score of 74 or 58%. Student activity in the pre-cycle has a percentage of 42%.

This study also examines students’ intrapersonal intelligence. The results of interviews with Natural Sciences teacher explained that students still did not understand the material. The calculation result of intrapersonal intelligence questionnaire using SPSS 16.0.

Pre-cycle data related to intrapersonal intelligence of self-confidence states that as many as 87.1% of students have a deficiency in understanding learning on the material of characteristics of living things. In the second question, as many as 80.6% students did not realize the advantages in understanding learning on the material characteristics of living things. This second question is closely related to the first question. The third question stated that 93.5% of students did not dare to speak in front of the class. The fourth question showed that 93.5% of students do not dare to answer the questions given by the teacher. The fifth question of this self-confidence states that 71% of students do not dare to answer questions with their own answers.

The data also obtained the results of a questionnaire on self-reliance intrapersonal intelligence with the first question stated that only 64.5% of students study seriously. The second question showed that 67.7% of students can answer the teacher’s questions independently without the help of other
students. The third question 54.8% of students were able to do the assignments given by the teacher. The fourth question stated that 51.6% of students have not been able to foster enthusiasm in learning from themselves. The fifth question stated that 48.4% of students were able to study independently at home. The sixth question showed the percentage of 45.2% of students answering questions from the assignment with their own answers. The last question from the self-reliance intrapersonal intelligence questionnaire, 64.5% of students were able to work together with their group without seeing the results of other groups.

The reliability statistics is a Cronbach’s Alpha value of 0.424. This value is said to be bad because if the Cronbach’s Alpha value is less than 0.600, it means it is bad.

**Cycle 1 and 2**

This research was conducted through 2 cycles, namely cycle 1 and cycle 2, each cycle consisting of 4 stages. The results of the study indicate that:

1. **Implementation of Course Review Horay Strategy**

   Some students have difficulties in learning at MI Mazra’atul Ulum 01 Lamongan. Some efforts that can be done are by teaching kindness, enrichment activities, increasing motivation, and developing effective attitudes and habits (Ahmadi & Rohani, 1991). The application of the course review horay strategy is suitable to be applied in improving student development. This strategy was declared to be successful because there was an increase in the results of teacher and student activities in cycle 1 to cycle 2 as shown in Figure 1 and 2.

   **Figure 1.** Teacher activity graph

   Teacher activity in pre-cycle has a percentage of 58% which has a score of 74. This teacher activity was calculated based on the value obtained from the teacher’s activity table. In cycle 1, it had a percentage of 71%. Cycle 2 had a percentage of 73%. This means that from the pre-cycle, cycle 1 and cycle 2 always have an increase.

   **Figure 2.** Students activity

   Student activity in the pre-cycle has a percentage of 42%. This student activity is calculated based on the value obtained from the student activity table. In cycle 1 has a percentage of 58%. In the pre-cycle to cycle 1 has an increase of 16%. In cycle 2 has a percentage of 83%. From cycle 1 to cycle 2 has an increase of 25%. This means that from the pre-cycle, cycle 1 and cycle 2 always have an increase.

   Learning that activating students involved in learning is by forming groups. In the formation of these groups, students can work together between the more capable and the less capable students to learn and understand. In cycle 1, learning was conducted through student answering
different questions. In cycle 2, students answered together. This makes all students understand the questions as a whole, so the application of the course review horay strategy helps students to be more active in learning, because students can carry out various kinds of activities. Activities that can be done are question and answer, discussion, interact with groups, practice critical thinking, solve problems together, explore the meaning of knowledge, generate ideas, create real understanding, respect the opinions of group members, and participate actively in groups (Ninik Efi M, 2016).

1. Learning outcomes

Pre-cycle learning outcomes have a percentage of 13% with an average of 48.8, cycle 1 has an increase from pre-cycle, the percentage of cycle 1 is 94% with an average of 78.2 and cycle 2 has a percentage of 94% with an average of 78.6. In the pre-cycle, cycle 1 and cycle 2 were seen to increase from the resulting average. As presented in Figure 3 below.

The graph of the increase in student learning outcomes and intrapersonal intelligence presented in the form of percentages. In the pre-cycle student learning outcomes are 13%, cycle 1 is 94% and cycle 2 is 94%. The increase in cycle 1 and cycle 2 is the same but when compared to the average value, cycle 2 is higher. There is a change from pre-cycle to cycle 1 which in the SPSS 16.0 application the significant value is 0.724 with an average pre-cycle of 48.8 meaning that if the data is more than 0.05 then the data is normally distributed and can be continued and if the data is less than 0.05 then the data is not normal. Cycle 1 has an average of 78.2 and cycle 2 has an average of 78.6 with a significant value of 0.00 meaning that there are no differences, so this data is taken to strengthen the data in cycle 1.

The Kolmogorov-Smirnov includes case or sample tests. This test compares the distribution of one variable with a normal or uniform distribution. The normal distribution of the default parameters is the mean and the observed standard deviation. The default uniform parameter distribution is the minimum and maximum values (Arikunto, 2007).

The increase in students’ intrapersonal intelligence in pre-cycle was 42%, cycle 1 reached 69%, and cycle 2 reached 79%. There is a small difference student learning-outcomes in cycle 1 with cycle 2 which an average of 78.2 and cycle 2 has an average of 78.6. The increase was due to students solved the questions given by discussing with the members of each group. Through discussion, each member of the group can exchange opinions or ideas to get the right answer (Maryam, 2016). From the previous increase in pre-cycle and cycle 1, there was a drastic increase in learning by using the course review horay strategy. Through this strategy students have a passion for learning because learning becomes more effective. This is supported by M. Jaeng’s theory that learning becomes more effective when students actively learn through interaction in group work by expressing their ideas, assessing their own ideas and also asking for feedback from other people’s thoughts, namely friends in the group (Jaeng, n.d). In the learning
process, collaboration is also carried out by forming groups. As Miftahul Huda's stated that the formation of groups in the classroom has different backgrounds from other students ranging from different abilities, adjustments and needs. Group learning activities that each student is responsible for his own learning and improve the learning of group members. This is also supported by the theory that the strategy carried out by forming groups will make students open-minded (Najmonnis, n.d). The learning is also carried out in groups and values are taken from the results of group learning. This makes students motivated to compete so that the increase in learning outcomes in groups also increases. In cycle 1, learning outcomes in groups have an average of 83 and in cycle 2 have an average value of 92.

1. **Intrapersonal Intelligence**

Students' intrapersonal intelligence was investigated using a questionnaire filled out by students. Researcher also observed every activity carried out by students related to students' intrapersonal intelligence. The researcher guides in filling the questionnaire because students are confused about what to do in filling it. From the questionnaire filled by students, the results of students' intra-personal intelligence showed that pre-cycle had a percentage of 40%, cycle 1 had a percentage of 88% and cycle 2 had a percentage of 96%.

In cycle 1 the percentage has a high percentage, but it is continued with cycle 2. This is intended so that researchers can see and further strengthen the effectiveness of the course review horay strategy implementation. The application of course review horay strategy makes students become excited because they found the motivation to compete by saying "horay" to their opponents which means they tend to do their best. Students become enthusiastic in the learning process, they also get a star for those who dare to answer questions that were done in groups and correct answer. When students shout "Horay" they can liven up the class atmosphere and feel more comfortable and fun. The grouping of students into several groups creates a competitive spirit between groups to improve group performance so that motivation arises (Pramaditya, 2015).

![Figure 4. Interpersonal Intelligence Graph](image)

The course review horay strategy is an effective strategy in learning because it can improve the quality of education in Indonesia (Huda, 2012). Learning that activating students involved in learning is by forming groups. In the formation of these groups, students can work together between the more capable and the less capable students to learn and understand. In cycle 1, learning was conducted through student answering different questions. In cycle 2, students answered together. This makes all students understand the questions as a whole.

So, the advantage of this strategy is that the structure is interesting, not monotonous, because it is interspersed with entertainment so the learning atmosphere is not stressful, the enthusiasm for learning is increased because the learning atmosphere is fun and the skills of collaboration between students will be more trained.
CONCLUSION
Based on the results of the research and discussion, it can be concluded that the implementation of the course review horay strategy has done well through improvements in each reflection. It can be seen from the learning outcomes and intrapersonal intelligence of students in pre-cycle, cycle 1 and cycle 2. Students learning outcomes didn’t reached minimum completeness criteria in pre cycle, then it success to reach the criteria in Cycle 1 and Cycle 2. Intrapersonal intelligence of students in pre-cycle has a percentage of 40%, increased to percentage of 88% in Cycle 1, and increased to percentage of 96% in cycle 2.

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