

Influence of Discussion Rating in Cooperative Learning Type Numbered Head Together on Learning Results Students VII MTSN Model Padang

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Abstract. Related to the math score of the first semester in class at seventh grade of MTSN Model Padang which much the score that low (less than KKM). It because of the students who feel less involved in learning process because the teacher don't do assessment the discussions. The solution of the problem is discussion assessment in Cooperative Learning Model type Numbered Head Together. This study aims to determine whether the discussion assessment in NHT effect on student learning outcomes of class VII MTsN Model Padang. The instrument used in this study is discussion assessment and final tests. The data analysis technique used is the simple linear regression analysis. Hypothesis test results F_{count} greater than the value of F_{table} then the hypothesis in this study received. So it concluded that the assessment of the discussion in NHT effect on student learning outcomes of class VII MTsN Model Padang.

1. Introduction

There are several reasons why mathematics is mandatory for students to learn, according to Cornelius's statement in Abdurrahman (2010: 253) there are five reasons for the need to learn mathematics because mathematics is a clear and logical means of thinking, a means to solve problems in everyday life, relationship patterns and experience generalizations, means to develop creativity, a means to raise awareness of cultural development.

Based on the observations made in class VII MTsN Model Padang that the subject matter is still explained by the teacher in detail, and in the student's mathematics learning looks monotonous, when the teacher explains the subject matter most students are busy with their own activities such as disturbing the next friend, small groups, discussing things that are not related to the subject matter. Based on the results of interviews with teachers when teachers conduct the discussion activities in the classroom, students are less active and students who come to the front of the class tend to be the same, this is because at the time of discussion took place the teacher did not do the assessment. So students do not carry out the discussion task well. As a result the value of the first semester of class VII examination is under KKM (Minimum Criteria of Completeness). The KKM applied in this school is 75.

Based on the problems that have been described above, then in the learning process required a learning strategy that can motivate and enable students in learning and discussion. Learning strategy that makes students as subject and not object in learning, as well as learning strategy that can make



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students understand material concepts and able to improve learning outcomes, and conduct assessment of students during the discussion. Assessment of the discussion is done so that students really pay attention to the lesson during the discussion, and make the students active in the discussion, because each discussion is done who is active will be given additional value.

According to Nikson in Muliardi (2002: 3) "Mathematics learning is an effort to help students to construct mathematical concepts or principles with their own ability through internalization process so that the concept or principle can be rebuilt". Based on the quote can be concluded that in learning mathematics students are accustomed to gain understanding through experience about the properties possessed of an object. Mathematics learning is also a teacher's effort to help students to construct mathematical concepts or principles so that with their own ability and through the process of internalization students can build those concepts back.

One way teachers might be able to do this is by applying the discussion in the model of cooperative learning Numbered Head Together type. The discussion activities in the lesson will give the students a lot of information for their group's performances. According to Nurgiyantoro (2008: 254) "assessment of the discussion is one of the assessment process that allows for direct measurement that requires students to work in concrete and meaningful situations which also reflects the mastery of students to learning materials. Model of cooperative learning Numbered Head Together type is one form of learning with group discussion. According to Kagen in Abdul Majid (2013) states that "NHT is an approach developed to involve more students in reviewing the material covered in a lesson and checking their understanding of the content of the lesson", by applying the NHT strategy students are expected to be more independent and results student learning is increasing.

This study aims to determine whether the assessment of discussion in the model of cooperative learning Type Number Head Together have an effect on student learning outcomes class VII MTsN Model Padang.

2. Research Methods

The type of research is experimental research with the design of The One-Shot Case Study (Arikunto, 2010: 124). The population of this research is all students of class VII MTsN Padang Model Year Lesson 2014/2015 with sample class VII.7 as experiment class. The research instrument is an instrument of assessment of discussion and final test with 4 items of essay, which was tested in class VII.8 MTsN Model Padang with different class teacher with 42 students on February 25, 2015. The analysis technique used is linear regression analysis test simple because the sample data is normally distributed according to Sudjana (2005: 311) form of linear regression equation:

$$y = \beta_0 + \beta_1 x + \varepsilon, \quad (1)$$

with

$$b_0 = \bar{Y} - b_1 \bar{X}, \text{ and } b_1 = \frac{\sum X_i Y_i - (\sum Y_i) \left(\frac{\sum X_i}{n} \right)}{\sum X_i^2 - \left(\frac{\sum X_i}{n} \right)}, \quad (2)$$

To prove the hypothesis used F test. For the interpretation of the test by looking at the value of Fcount and Ftable value. If Fcount obtained is less than Ftable then reject H0 and vice-verse H0.

3. Research Result and Discussion

Based on the calculation of the value of discussion each meeting obtained increase in value at each meeting as in Table 1. Table 1 shows the average value of the students' grade discussion in the experimental class experiencing an increase of each meeting. The research hypothesis is "discussion assessment in cooperative learning model type Numbered Head Together have an effect on student learning result class VII MTsN Model Padang".

Table 1. Average Rating Result of Discussion Assessment

No	Average Results of Discussion Assessment of each Meeting			
	I	II	III	IV
1	58,13	--	--	--
2	--	72,82	--	--
3	--	--	86,11	--
4	--	--	--	95,24

The sample class is normally distributed and tested by regression analysis to determine the contribution of the influence of the discussion assessment in the NHT type cooperative learning model to the student learning outcomes. So, hypothesis test is done by F test, obtained $F_{hitung} = 7.20$ whereas value $F_{(42,0,0)} = 4,07$, this means $F_{count} > F_{table}$. If $F_{count} > F_{table}$, then reject H_0 . So it can be concluded that the assessment of discussion in the model of cooperative learning type Numbered Head Together affect student learning outcomes class VII MTsN Model Padang.

Model of learning Numbered Head Together is one model of learning that includes the type of group learning. Group activities that have been done by teachers in the sample class are regular group activities without any assessment during the activity process. So not all students feel involved in the discussion activities. Assessment of the discussion is an assessment activity undertaken during the discussion process. This assessment is expected to make the students feel involved in the activities of the Numbered Head Together, because this assessment is aimed at each individual within the group.

Based on the tests conducted, the experimental class score of student test scores above the KKM as many as 29 people while previously 21 people. The average value of the experimental class test was 78.64 while the major contribution of the discussion assessment to the final test was 15.26%. It can be seen that the students' discussion of students' influence on students' learning outcomes.

4. Conclusions and Recommendations

Based on the results of data analysis and discussion that has been raised then obtained the conclusion that the assessment of discussion in Numbered Head Together affect the results of learning mathematics students VII MTsN Model Padang. The variation of the students' learning outcomes by 15.26% is influenced by the assessment of the discussion in NHT learning, which means there is a fairly positive relationship or there is a direct relationship between the assessment of discussion in learning mathematics using NHT on student learning outcomes with the regression model $y = -3.03 + 1.05x$ and correlation coefficient of 0.39.

Based on the results of the research, it is expected that math teachers can apply Numbered Head Together (NHT) as an alternative to achieve learning objectives. For future researchers to be done on other subjects and can allocate time well for the results achieved in accordance with the expected.

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