

THE CONTRIBUTION OF MATHEMATICS LEARNING METHOD THROUGH THE IMPROVISATION OF THE STUDENT DISCIPLINARY

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ABSTRACT

The dressing of students disciplinary at IX grade of MTs Muhammadiyah 2 Kalibening Banjarnegara in the Academic Year of 2016/2017 and to know the contribution of the student in mathematics learning at grade IX of Islamic Junior High School (MTs) Muhammadiyah 2 Kalibening 2 Banjarnegara in the Academic Year of 2016/2017. The type of this research was qualitative by wing purpose sampling. The subject was collected from IX-A. The data was collected using observation and questionnaire. Content validation was used to analyze the instrument of the research. The research was analyzed by using the descriptive qualitative method. Baredt on the result of the research, the researcher concludes that the method is learning on a tribute by improvising the students' learning discipline at IX grade of MTs Muhammadiyah 2 Kalibening Banjarnegara Academic Year of 2016/2017. It was shown by the achievement which students got before and after giving an action. The students' average score was 55, and into 57,67, re-teaching affected the low classroom. The middle classroom had an average score of about 60,33 at first and turned into 62,58 because it was given action. The improvement of student's disciplinary learning was contributed by conventional learning. Next, the full classroom about 70,2 before getting action. After giving an action, it increased by about 72. It can be concluded that the improvement of student's disciplinary learning was contributed by learning methods. The re-teaching learning method is contributive because it showed that the full classroom's improvement affects the bottom classroom.

Keyword: Disciplinary Learning, Learning Methods, Mathematic

INTRODUCTION

Improving the quality of education is one of the efforts in answering problems and various challenges that are always present in human life. According to Sofan Amri (2013: 1): Efforts to improve education quality must be made by moving all the components that play a role in education quality. Components inherent in education include the curriculum, teachers, and students. A teacher's existence is very urgent in the learning process because what determines learning goals is achieved or not and student competence. To carry out improvement in the quality of education, it is expected that teachers' role in the selection of the use of methods. According to Rusman (2012: 78), teachers are expected to choose and use learning methods by the material to be delivered. Some learning methods that can be used are independent, conventional learning methods, and re-teaching methods.

The independent learning method is taken from the independent learning model. The independent learning model according to Rusman (2012: 357), Independent learning activities are one form of learning activities that focuses on the awareness of learning of a student or more hands over learning control to students themselves. For that self-learning method, students are more involved in learning than teachers because students are given more freedom in learning.

Conventional learning methods are taken from conventional learning models. According to Shoimatul Ula (2013: 116) Conventional learning model, Conventional-conservative learning patterns view that the learning process is carried out. Generally, the teacher/educator gives knowledge to students, and students tend to be recipients. Thus, conventional learning methods require more teacher roles because they must have sufficient knowledge to be conveyed to students. According to Nurdin (2005: 23), re-teaching learning is the treatment given to students after attending regular learning. It is intended that psychologically low-ability students do not feel treated as second-grade students in the

class. The re-teaching method allows students who are less able to attend regular learning to get more attention from the teacher in the form of repetition of the material taught.

The learning method applied is the teacher's responsibility in choosing the right method. At the same time, the role of students is no less critical. Students must have discipline in the learning process so that learning becomes conducive. According to Sofan Amri (2013: 162), discipline is essential and needed by every student. Discipline is a prerequisite for the formation of disciplined attitudes, behavior, and order of life, which will lead a student to success in learning.

This research is the contribution of the application of learning methods to the discipline of mathematics learning for students of class IX even semester of MTs Muhammadiyah 2 Kalibening Banjarnegara District 2016/2017 Academic Year?. This study aims to determine the contribution of the application of learning methods to the discipline of learning mathematics in class IX even semester MTs Muhammadiyah 2 Kalibening Banjarnegara District 2016/2017 Academic Year.

METHODS

The type of research that is relevant to this research is qualitative research. According to Sugiyono (2015), a qualitative research method is a research method based on the philosophy of postpositivism, used to examine the natural conditions of objects (as opposed to being an experiment) where the researcher is as a critical instrument, the sampling of data sources is done purposively, and snowball, the technique of collecting with triangulation (combined), data analysis is inductive/qualitative. Qualitative research results emphasize more on meaning than generalization.

This research was conducted in class IX MTs Muhammadiyah 2 Kalibening Banjarnegara Regency when the research was conducted in the even semester of the 2016/2017 school year. This study's subjects were class IX, even semester MTs Muhammadiyah 2 Kalibening Banjarnegara Regency 2016/2017 school year. Determination of the subject in this study was purposive sampling based on the teacher's consideration of student discipline during initial observations to obtain a sample of class IX A even semester students of MTs Muhammadiyah 2 Kalibening Banjarnegara Regency 2016/2017 school year with a total of 26 students.

This study divides three groups based on discipline obtained from the disciplinary questionnaire and disciplinary observation sheets with predetermined criteria. The three groups are high, medium, and low. The high group consisted of students who received high category questionnaire scores and disciplinary observation sheets. The moderate group consisted of students who received medium category questionnaire scores and disciplinary observation sheets. The low group consisted of students who received low category questionnaire and disciplinary observation sheets.

Each group will be treated with one learning method from the three available methods: the independent study method, lecture, and re-teaching. Based on disciplinary indicators, students with high discipline are more diligent in learning. They can manage time than students in medium and low groups. This is by the characteristics of independent learning that require students to study the material independently, one of them reading books. The independent study method is more suitable for high group students. The group students have good attention. Compared to the low group, excellent attention in the classroom is more owned by the medium group, which will maximize lecture methods learning. Group students are learning by the lecture method. Low group students are certainly not able to manage learning time and are lacking attention in class. Low groups are more suitable for re-teaching learning because it is in the form of repetition of the material taught. Data collection techniques used by researchers are observation and questionnaires. This technique is used because it is considered adequate to get the required data. Experts validated the questionnaire instrument and observation sheet. In this study to obtain data validity is done by triangulation data credibility test.

RESULTS AND DISCUSSION

The early learning discipline data of class IX A students of MTs Muhammadiyah 2 Kalibening Banjarnegara Regency in the even semester of the 2016/2017 academic year were obtained from the

learning discipline questionnaire score of 20 observations totaling 15 statements. They obtained the highest overall score of 72 and the lowest score of 53. Results can be seen in the following Table 1.

Table 1. Results Grouping students by questionnaire and observation sheet before the study

Discipline score scale		Frequency
Score \leq 56,15	low	8
56,15 < Score \leq 67,85	medium	12
score > 67,85	high	5

Based on the data above, the results show that there are five students in the high group, 12 students in the medium group, and eight students in the low group.

Learning discipline data at school was obtained from a learning discipline questionnaire score of 20 statements and observations totaling 15 statements. The highest score was 73, and the lowest score was 53. After being given the above treatment, the results were summarized as in Table 2.

Table 2. Results grouping students by questionnaire and observation sheet before the study

Discipline score scale		Frequency
score \leq 56,44	low	4
56,44 > score > 68,8	medium	15
score > 68,80	high	7

The results show that class students have moderate discipline based on the table above. The highest frequency is in the medium category.

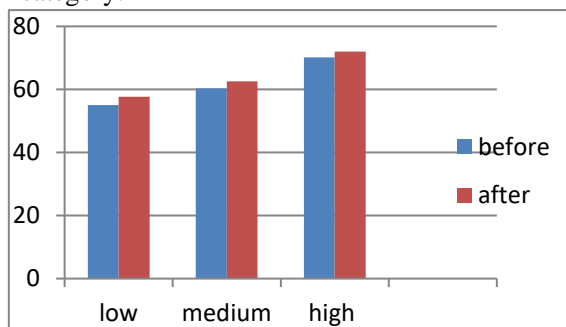


Figure 1. Comparison diagram of the initial score and the final score of discipline

Figure 1 based on the results of questionnaire scores and student learning discipline. The score before the action is indicated by the blue bar diagram and the red bar diagram's post-action score. Based on the calculations' results, the results show that the low group category's initial discipline score is students who get learning by a re-teaching method consisting of 3 students who obtained an average of 55. After taking action, they obtained an average of 57.67 of the three students. The low group experienced an increase in discipline score of 2.67. The next result is that in the medium group, the moderate number of students consists of 12. The group students get regular learning with conventional learning methods to get an average learning discipline score of 60.33 before action and obtain an average score of discipline learn 62.58 after taking action. Based on these results, the group is experiencing an average increase in scores after taking action of 2.25. The high group results are groups that get independent learning. Totaling five students obtained an average score of mathematics learning discipline before taking 70.2. After taking action, they obtained an average disciplinary score of 72. The results show that a disciplinary score in the group is experiencing an average increase of 1.8.

Based on the data analysis calculations above, the results obtained are very much in line with what happens to students when action is taken. At the time of treatment, there were no significant changes in students' attitudes than the students' attitudes during observation. Students with high discipline from the results before the treatment looked disciplined during the treatment and were calmer than students of moderate or low groups. Students follow the teacher's instructions, such as reading

textbooks and discussing with each other. It seems natural for high groups because it has become a habit. Nonetheless, there was a slight increase, such as students who were more active during the discussion.

In conventional methods, students tend to listen to what is taught by the teacher. Some students seem to note important things that are taught by the teacher. However, students become the teacher's focus only, and students' habits are seen when before treatment, such as often joking. Some students do not record the material taught is still visible when treatment, but after the teacher gives a warning, new students implement it. When discussing problems, not all students are involved and are seen in one group while only relying on one student. However, it happened in 2 small groups in the medium group, and most students had carried out the teacher's instructions well.

Re-teaching learning methods that have been done show students tend to wait for the teacher's explanation. Students usually cannot understand the material in one discussion. Students tend to have difficulty understanding material if the teacher has not repeated the material being taught. Students are passive and do not take the initiative to learn the material to be studied next because they have not understood the material before. After learning the same material, students become more enthusiastic in listening and working on problems because students feel more understanding of the material. Some students from the lower group at the second meeting collect homework before starting the lesson even though they rarely do homework at the previous meeting.

CONCLUSION

Based on Chapter IV's research results, the researcher can conclude that the learning method improves student discipline in class IX MTs Muhammadiyah 2 Kalibening even semester of the 2016/2017 school year. This can be shown by increasing the average score of learning discipline between before and after the action. The average score of the previous low group was 55. After the action became 57.67, then the re-teaching learning method contributed to the low group's increase. The group is currently having an initial average score of 60.33. After the action being 62.58, conventional learning methods contribute to an increase in learning discipline.

Furthermore, for the high group, the initial score before the action averaged 70.2. After the action became 72, the independent learning method contributed to the improvement of learning discipline. Re-teaching learning methods contribute most because of the highest average increase in the low-class discipline with re-teaching learning methods.

REFERENCES

- Amri, Sofan. 2013. *Pengembangan dan Model Pembelajaran dalam Kurikulum 2013*. Jakarta: Prestasi Pustaka Publisher. (halaman 1 dan 162)
- Nudin, Syafruddin. 2005. *Model Pembelajaran yang Memperhatikan Keragaman Individu Siswa dalam Kurikulum Berbasis Kompetensi*. Ciputat: QuantumTeaching. (halaman 23)
- Rusman. 2012. *Model-model Pembelajaran -an*. Jakarta: Rajawali Pers. (halaman 78 dan 357)
- Sugiyono. 2015. *Metode Penelitian Pendidikan pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: CVAlfabeta
- Ula, Shimatul. 2013. *Revolusi Belajar*. Jogjakarta: Ar-Ruzz Media. (halaman 116)