Implementation of Discovery Inquiry Learning Model to Improve the Activities and Achievements of Learning Mathematics Materials Reducing Area Formulas Flat Building for Students of Class VI Semester I SD Negeri Jenang 10 2017/2018 Academic Year

Ahmad Latif[1], Atik Meliani[1]
[1]SD Negeri Jenang 10
[1]Universitas Muhammadiyah Purwokerto

ARTICLE INFO

ABSTRACT

The research entitled Application of the Discovery Inquiry Learning Model to Increase Learning Activity and Achievement in Mathematics for the Material of Lowering the Area of a Flat Shape Formula in Class VI Semester I Students of SD Negeri Jenang 10 Academic Year 2017/2018. With research subjects totaling 10 children consisting of 8 boys and 2 girls. This research was conducted because the students' learning achievement was low in pre-cycle conditions with an average value of 55. This research was carried out in two cycles, each cycle using the Discovery Inquiry learning model. Data collection was carried out through questionnaires, tests, and observations. Indicators of success in this study if 85% of students complete learning and show activeness. The results showed an increase in student learning activity from cycle I and cycle II, namely in cycle I achieved a score of 45.5 entered in the good category increased to 55 entered in the very good category in cycle II. The results of student achievement also increased. The results of student achievement in cycle I reached an average of 71.5 and increased in cycle II to 82.5. From the research results. learning completeness increased in cycle I (60%) and in cycle II (100%), there was an increase in learning mastery by (40%). The application of the Discovery Inquiry learning model can increase student learning activities and achievements.

Corresponding Author:
Ahmad Latif
SD Negeri Jenang 10, Universitas Muhammadiyah Purwokerto
Email: -

1. INTRODUCTION

In SD Negeri Jenang 10, students in grade VI material for Lowering the Area of Flat Shape formula, students find it difficult to understand the formula for the area of a flat shape and apply it to learning material which causes low student achievement. Students who have completed learning are only 3 people or 30% and those who have not completed 7 students or 70%. with an average score of 55, it is still below the specified KKM, which is 60. The low achievement in Mathematics learning at SD Negeri Jenang 10 shows the low student learning activity and the teacher's ability to manage learning is not in accordance with the characteristics of the students. To overcome this problem, namely by applying the Discovery Inquiry Learning Model.

91

RESEARCH PURPOSES
1. To increase the learning activities of class VI students at SD Negeri Jenang 10 in learning mathematics the material for calculating the area of flat shapes through the Discovery Inquiry learning model
2. To improve the learning achievement of class VI students at SD Negeri Jenang 10 in learning mathematics the material for calculating the area of flat shapes through the Discovery Inquiry learning model.

2. RESEACH METHOD

The research was conducted in Class VI of SD Negeri Jenang 10, Majenang District, Cilacap Regency. The reason for choosing the place was because the researcher was assigned to the SD making it easier to obtain data. In addition, the official duties of the researcher were not disturbed. The research was conducted in semester I of the 2017/2018 school year. From August 2017 to October 2018.

The research subjects were all grade VI students of SD Negeri Jenang 10 Academic Year 2017/2018 with a total of 10 students consisting of 8 boys and 2 girls. The techniques used to collect data are tests, observation sheets, and field note sheets.

To determine the level of success of students after the teaching and learning process for each cycle is carried out by providing an evaluation in the form of written test questions at the end of the cycle. The analysis performed is in the form of simple statistics. This study used 2 cycles, each cycle consisting of planning, acting, observing and reflecting. Each cycle consists of two meetings (4 hours of lessons) where each hour of lessons consists of 35 minutes.

3. RESULT AND DISCUSSION

From the results of observations before Class Action Research the implementation of the teaching and learning process carried out at SD Negeri Jenang 10 has not used the right method according to the material so that students' understanding of the material taught by the teacher is still low, the methods used are also not innovative which results in low student activity in learning process. This is evidenced by the low classical mastery. The daily repetition gain in the conditions before the new action reached an average class of 55 with 30% completeness. Student activity in teaching and learning activities is still low. The teacher's efforts to improve the learning process by applying the Discovery Inquiry learning model. The results of the per-cycle research are described below.

a. Cycle 1

From the implementation of cycle 1, data obtained through observation were collected for analysis. that in cycle 1 there was an increase from the class average of 55 in the conditions before the action to 71.5 with 66% classical completeness in cycle 1, but the acquisition of this percentage has not yet reached the specified classical completeness indicator of 85%, it is necessary to continue in cycle next for repairs. Student activity in cycle 1 reached 45.5 which was classified as high, teacher activity was also classified as good, reaching 80% in cycle 1.

b. Cycle 2

The results of student achievement in cycle 2 the number of students who passed there were 10 students or 100%, a very good increase from the class average of 71.5 in cycle 1, in cycle 2 it became 82.5. Student activity has also increased from a total score of 45.5 included in good criteria, increased in cycle 2 to 55 included in very good criteria. Teacher performance also increased from 80% in cycle 1 to 97% in cycle 2 with very good criteria.

4. CONCLUSION

The application of the Discovery Inqiry learning model can increase the activity and learning achievement of class VI students at SD Negeri Jenang 10 in the mathematics subject matter by deriving the formula for the area of a flat shape. Below are the results of observations from classroom action research that has been conducted:

1. Student learning activities have increased from cycle 1 to cycle 2. Students who have positive learning activities in cycle 1 reach 45.5 and increase to 55 in cycle 2.
2. Student achievement has increased both the class average score and the learning completeness from the pre-cycle, cycle 1 and cycle 2, the class average value in the initial conditions is 55 and mastery reaches 30% increasing to an average value of 71.5 and mastery reached 60% in cycle I and increased again to an average value of 82.5 and mastery reached 100% in cycle II.

REFERENCES
[1] Ahmadi and Supriyono. 2004. Class Action Research. Bandung: Alpha Beta
[2] Arifin,R, Tabrani,dkk.1998.Pendekatan Dalam Proses Belajar Mengajar.Bandung: Remaja Rosdakarya.

[3]   Hamalik, O. 2007. *Teaching and Learning Process.* Jakarta: PT. Bumi Aksara
[4]   Hamza B. Uno. 2007. Learning *Model.* Jakarta : Bumi Aksara
[5]   Hudoyono. 1990. Nature Of Learning. Online
[6]   Muslich. 2009. *KTSP Basic Understanding and Development of Guidelines for Managers of Educational Institutions, School Supervisors, Principals, School Committees and Teachers.* Jakarta : Bumi Aksara
[7]   Mulyasa, E. 2007. *Competency Based Currikulum.* Bandung : Remaja Rosda Karya
[8]   Natawijaya 2005. *Definition of Activity.* Online
[9]   Nunnally. 1998. *Research Methodology.* Online
[10]   Permendiknas No.22. 2006. *About Content Standards and Graduation Standards*
[11]   Sanjaya. 1997. *Educational Process Standards Oriented Learning Strategies.* Jakarta : Kencana Prenada Media Group.
[12]   Sardiman, A.M. 2003. *Interaction & Motivation for Teaching and Learning.* Jakarta: Rajawali
[13]   Trianto. 2010. *Designing a Progressive Innovative Learning Model.* Jakarta: Kencana