ABSTRACT

The Improvement of Students' Activities and Mathematics Learning Outcomes Using *Problem Based Learning Model* in the Fourth Grade of SDN 03 Koto Lamo of Lima Puluh Kota Regency

Nansi Ariana

Mathematics is a universal science which underlies the development of modern technology, has important roles in various disciplines, and promotes human thought. The process of learning mathematics in the fourth grades SDN 03 Koto Lamo not fully in accordance with the demands of the curriculum. Still centered learning to the learners. In addition, learners are less enjoys math, math is because they find school is still conventional. Teachers still use methods of lecture and question and answer. In addition, students are less motivated and feel bored in the learning process, it can be seen from the activity of students in the learning process as play when learning and annoy your friends. So that the learning of mathematics learners are less interested in the following study. The objective of the research was to improve Students' activities and learning outcomes using *Problem Based Learning Model* in the subject of mathematics in the fourth grade of SDN 03 Koto Lamo**.**

The research was conducted in two cycles, started from September until October 2016. The research was located in SDN 03 Koto Lamo with sixteen students of the fourth grade as subjects of the research. The data were collected through observation and test. The effectiveness of the actions in each cycle from the result of the observation dan test was described then reflected in order to take corrective actions for the next cycle.

The findings of the research showed that the use of *Problem Based Learning Model* could improve students' activities and learning outcomes. In mathematics learning, the activities observed were listening activities, oral activities, mental activities, and emotional activities. The improvement of the activities can be seen from the increase of the percentage which was 70,6% in cycle one, and 82,6% in cycle two. The cognitive aspect of learning outcomes with average score of 68,1 which was not finished in cycle one became 77,5 in cycle two. The affective aspect with average score of 62,2% in cycle one became 73,2 in cycle two. The psychomotor aspect with average score of 75% in cycle one became 81,3% in cycle two. Based on the findings, it can be concluded that *Problem Based Learning Model* can be used as an alternative to improve students' activities and outcomes in mathematics learning.

ABSTRAK

Peningkatan Aktivitas dan Hasil Belajar Matematika Siswa dengan Model *Problem Based Learning* di Kelas IV SDN 03 Koto Lamo Kabupaten Lima Puluh Kota

Nansi Ariana

Matematika merupakan ilmu universal yang mendasari perkembangan teknologi modern, mempunyai peran penting dalam berbagai disiplin dan memajukan daya pikir manusia. Proses pembelajaran matematika di Kelas IV SDN 03 Koto Lamo belum sepenuhnya sesuai dengan tuntutan kurikulum. Pembelajaran masih berpusat kepada peserta didik. Selain itu, peserta didik kurang menyenangi pelajaran matematika, disebabkan karena pelajaran matematika yang mereka dapati disekolah masih bersifat konvensional. Guru masih menggunakan metode ceramah dan tanya jawab. Selain itu, peserta didik kurang termotivasi dan merasa bosan dalam mengikuti proses pembelajaran, hal ini dapat terlihat dari aktivitas siswa dalam proses pembelajaran seperti bermain ketika belajar dan mengganggu teman. Sehingga pada pembelajaran matematika peserta didik kurang berminat dalam mengikuti pembelajaran. Tujuan penelitian ini adalah untuk meningkatkan aktivitas dan hasil belajar siswa menggunakan model *problem based learning* pada mata matematika di kelas IV SDN 03 Koto Lamo.

Penelitian ini dilakukan dalam 2 siklus, dimulai pada bulan September sampai dengan Okober 2016. Penelitian ini berlokasi di SDN 03 Koto Lamo dengan subjek penelitian guru kelas IV. Data penelitian dikumpulkan melalui observasi dan tes. Keefektifan tindakan pada setiap siklus dari hasil observasi dan tes dideskripsikan kemudian direfleksikan untuk melakukan tindakan perbaikan pada siklus berikutnya.

Temuan pada penelitian pembelajaran matematika aktivitas belajar siswa yang diamati yaitu: *Listening activities*, *oral activities*, *mental activities* dan *emotional activities*. Peningkatan aktivitas terlihat pada siklus I dengan persentase 70,6% pada siklus II menjadi 82,6%. Peningkatan hasil belajar pada aspek kognitif siklus I dengan nilai rata-rata 68,1% dengan kategori tidak tuntas pada siklus II diperoleh nilai rata-rata 77,5%. Pada aspek afektif siklus I dengan nilai rata-rata 62,2% pada siklus II diperoleh nilai rata-rata 73,2%. Pada aspek psikomotor siklus I dengan nilai rata-rata 75% pada siklus II menjadi 81,3%. Berdasarkan temuan penelitian dapat disimpulkan bahwa model *problem based learning* dapat digunakan sebagai salah satu alternatif untuk meningkatkan aktivitas dan hasil belajar siswa pada pembelajaran matematika.