ABSTRAK

Penelitian ini merupakan penelitian kualitatif. Pengumpulan data dilakukan menggunakan metode tes dan wawancara serta dokumentasi. Penelitian ini bertujuan untuk memperoleh desain didaktis hipotesis materi segitiga sama sisi berdasarkan *learning obstacle* guna mengatasi *learning obstacle* dan *learning trajectory* yang dialami siswa dalam mempelajari materi segitiga sama sisi, dan learning trajectory siswa, serta mengetahui pengaruh implementasi desain didaktis dan desain didaktis empirik materi segitiga sama sisi terhadap leaning obstacle sebab kesalahan siswa dalam memahami konsep berdampak pada hasil belajar siswa. Subjek penelitian siswa kelas IV yang berjumlah 15 orang. Dalam penelitian ini tes dibagi menjadi 3 bagian yaitu tes diagnostik terhadap 25 orang siswa dengan diberikan 5 buah soal, kemudian dianalisis kesalahannya berdasarkan indikator dan dilanjutkan mewawancarai guru kelas guna mengetahui *learning obstacle* yang dialami oleh siswa selanjutnya peneliti menganalisis materi, buku teks beserta rencana pembelajaran yang digunakan selanjutnya peneliti merancang HLT dan *Design Didaktis* selanjutnya tes kemampuan prasyarat terhadap 15 orang siswa dengan diberikan 5 soal pilihan ganda dan dianalisis hasil jawaban siswa selanjutnya peneliti melakukan uji coba desain di kelas IV SD Negeri 93 Palembang. Setelah itu, siswa melakukan tes identifikasi akhir dengan diberikan 5 buah soal uraian yang selanjutnya dianalisis dan hasil penelitian diperoleh peningkatan hasil belajar siswa dari uji coba desain.

Kata kunci: analisis learning obstacle, segitiga sama sisi, desain didaktis

ABSTRACT

This research is a qualitative research. Data collection was carried out using test and interview methods as well as documentation. This research aims to obtain a hypothetical didactical design for equilateral triangle material based on learning obstacles in order to overcome learning obstacles and learning trajectories experienced by students in studying equilateral triangle material, and students' learning trajectories, as well as knowing the effect of implementing didactic design and empirical didactical design on equilateral triangle material. side of the leaning obstacle because students' mistakes in understanding concepts will have an impact on student learning outcomes. The research subjects were 15 class IV students. In this research, the test was divided into 3 parts, namely a diagnostic test on 25 students with 5 questions given, then the researcher analyzed the material, textbooks and lesson plans provided. used, then the researcher designed the HLT and Didactical Design, then the researcher conducted a prerequisite ability test on 15 students by being given 5 multiple choice questions and analyzing the results of the students' answers, then the researcher conducted a design trial in class IV of SD Negeri 93 Palembang. After that, students carried out a final identification test where they were given 5 descriptive questions which were then analyzed and the research results showed an increase in student learning outcomes from design trials.

Key words: learning obstacle analysis, equilateral triangle, didactic design