

ABSTRAK

Wardani, Oktapianis Rindi.(2015). Pengembangan alat peraga matematika SD materi penjumlahan dan pengurangan berbasis metode Montessori.Skripsi. Yogyakarta: Program Studi Pendidikan Guru Sekolah Dasar, Universitas Sanata Dharma.

Siswa usia sekolah dasar mulai berpikir logis dengan bantuan benda konkret berupa alat peraga. Metode Montessori merupakan metode yang menciptakan lingkungan belajar dengan memanfaatkan alat peraga.Penelitian ini mengembangkan alat peraga matematika berbasis metode Montessori dengan ciri menarik, bergradasi, auto-correction, dan auto-education. Salah satu ciri tambahan yang dikembangkan oleh peneliti adalah kontekstual. Penelitian dilakukan di SD BOPKRI Gondolayu Yogyakarta pada siswa kelas I tahun ajaran 2014/2015 selama enam bulan.

Jenis penelitian yang digunakan adalah penelitian dan pengembangan (R&D).Penelitian ini dibatasi sampai pada uji coba lapangan terbatas terhadap enam orang siswa. Langkah penelitian ini terdiri dari lima tahap, yaitu menganalisis potensi masalah, perencanaan penelitian, pengembangan desain, validasi produk, hingga uji coba lapangan terbatas.

Produk yang dikembangkan telah divalidasi oleh ahli di bidangnya.Hasil validasi produk menunjukkan bahwa, (1) alat peraga memiliki lima ciri, yaitu menarik, bergradasi, *auto-correction*, *auto-education*, dan kontekstual. (2) memiliki rerata skor3,5 dan masuk kategori “sangat baik”. Hasil tes siswa yang juga menunjukkan peningkatan sebesar 63,29% dari *pretest* ke *posttest* setelah menjalani pendampingan menggunakan alat peraga papan penjumlahan dan pengurangan. Oleh karena itu alat peraga papan penjumlahan dan pengurangan yang dikembangkan sudah layak untuk diujicobakan dalam skala yang lebih luas sebelum diproduksi secara masal.

Kata kunci : metode penelitian dan pengembangan, alat peraga Montessori, penjumlahan dan pengurangan, matematika.

ABSTRACT

Wardani, Oktapianis Rindi. (2015). *Developing a set of mathematics teaching aids for addition and subtraction material based on Montessori Method for Elementary School*. A thesis. Yogyakarta: Department of Teacher Training of Elementary School, Sanata Dharma University.

Elementary School students start thinking logically by using concrete objects as teaching aids. Montessori Method creates an independent learning environment by applying teaching aids. This research develops at developing mathematical teaching aids based on Montessori Method with these characteristics: attractive, gradation, auto-correction, and auto-education. While contextual was found by observer as an additional characteristic. This research was conducted in SD BOPKRI Gondolayu Yogyakarta on grade I, academic year of 2014/2015 for six months.

This study applied research and development (R&D). This research was applied to six students in a limited field tryout. There are five stages in this research: (1) problem analysis, (2) research planning, (3) design development, (4) product validation, and (5) limited field tryout.

The product was validated by credible experts. The result showed: (1) the teaching aids have five characteristics: attractive, gradation, auto-correction, auto-education, and contextual; (2) the validation score was 3,5 on average and was categorized as “very good”. The test result increased 63.29% from pretest to posttest after they learned by using addition and subtraction boards. Therefore, the addition and subtraction board which have been developed is proper to be tried out in a larger scale before being produced massively.

Keywords: research and development method, Montessori teaching aids, addition and subtraction, mathematics.