ABSTRAK

Dewi, Charla Emitara. (2015). *Pengembangan alat peraga pembelajaran matematika SD materi perkalian dan pembagian berbasis metode Montessori*. Skripsi. Yogyakarta: Program Studi Pendidikan Guru Sekolah Dasar, Universitas Sanata Dharma.

Kata kunci: metode penelitian dan pengembangan, metode Montessori, alat peraga, perkalian dan pembagian, matematika.

Pendidikan merupakan salah satu konsep yang telah dirumuskan secara jelas dalam pembukaan Undang-Undang Dasar 1945. Pendidikan di Indonesia mengalami penurunan kualitas. Hal ini dibuktikan dengan lemahnya pemahaman konsep dasar matematika. Kondisi ini menuntut pendidik untuk melakukan inovasi pembelajaran, salah satunya penggunaan alat peraga. Penelitian ini dilakukan di SDK Pugeran I Yogyakarta pada siswa kelas II. Tujuan dari penelitian ini ialah mengembangkan alat peraga berbasis metode Montessori.

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 atas lima tahap, yaitu (1) potensi masalah, (2) perencanaan, (3) pengembangan desain (4) validasi produk, (5) uji coba lapangan terbatas. Hasil dari penelitian ini adalah prototipe alat peraga matematika berbasis metode Montessori berupa kotak perkalian dan pembagian.

Produk alat peraga yang dikembangkan telah divalidasi oleh ahli dibidangnya, yakni ahli pembelajaran matematika Montessori, ahli pembelajaran matematika, guru kelas II dan enam orang siswa pada uji coba lapangan terbatas. Hasil penelitian ini menunjukkan bahwa alat peraga memiliki 5 ciri khas, yaitu menarik, bergradasi, *auto-education*, *auto correction* dan kontekstual, yaitu dengan rerata skor 3,7 dan masuk ke dalam kategori “Sangat Baik”. Hasil tes siswa juga menunjukkan perbedaan sebesar 90,4%. Ini adalah hasil dari *prestest* ke *posttest* setelah menjalani pendampingan menggunakan alat peraga kotak peraga perkalian dan pembagian. Perbedaan ini sebagai bukti yang mendukung bahwa alat peraga kotak perkalian dan pembagian layak digunakan.

ABSTRACT

Dewi, Charla Emitara. (2015). Developtment of Elementary School mathematic learning of muliplication and division based on Montessori Method. A thesis. Yoyakarta: Elementary Teacher Education Program, Sanata Dharma University.

Keywords: research and development method, Montessori method, learning media, muliplication and division, mathematic

Education is a concept that has been clearly stated in the preamble of Undang-Undang Dasar 1945 (Indonesian constitution). Indonesian education system has degraded nowadays. It is proven through poor understanding of basic concepts of mathematics. This condition demands educators to make some teaching innovation, one of them is by using teaching aid materials. This research was conducted at SDK Pugeran I Yogyakarta the second grade students as the subject. It aims to develop a teaching material based on Montessori method.

This study adopted research and development (R&D). The media were tried out to six students. The Development applied five stages The type of research used in this thesis is research and development (R & D). This research was limited up to the field test limited to six students of second grade elementary school. The steps consist of five stages: (1) problem potency, (2) planning, (3) design development, (4) product validation, (5) limited field test. The result of this research is a prototype Montessori-based mathematic material consisting of multiplication and division boxes.

The developed product has been validated by the experts: mathematic learning expert, Montessori mathematic expert and the teacher of second grade students; and six second grade elementary school student at a limited field test. The result showed that the product has five distinct characteristic, they are interesting, having gradation, auto-education, auto-correction, and contextual, with for the average score this material is categorized as to be ‘‘Very Good’’. The Students test result also indicates a difference that is shown to be 90.4%. The differences result is taken based on a series of test, pretest up to the posttest, after the mentoring using the Montessori material prototype of multiplication and division. The differences acts as a supporting proof that the Montessori material of multiplication and division were worthy of use.