

ABSTRAK

JOKO MARIONO. Pengembangan Perangkat Pembelajaran Berbasis Budaya Melayu dan Pendekatan Kontekstual untuk Meningkatkan Kemampuan Representasi *Visual Thinking* Siswa MTs Negeri Tanjung Pura. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2019.

Penelitian ini bertujuan untuk mengetahui: (1) kepraktisan perangkat pembelajaran Berbasis Budaya Melayu dan Pendekatan Kontekstual untuk Meningkatkan kemampuan representasi *visual thinking* siswa MTs Negeri Tanjung Pura. Berdasarkan dari hasil uji coba I, uji coba II perangkat pembelajaran Berbasis Budaya Melayu dan Pendekatan Kontekstual dikembangkan terpenuhi praktis, ditinjau dari: a) Respon Guru terhadap perangkat memenuhi skor rata-rata 3,16 kategori baik; b) Respon Siswa terhadap perangkat memenuhi skor rata-rata 3,08 kategori baik. (2) keefektifan perangkat pembelajaran ditinjau dari: a) Ketuntasan belajar kemampuan representasi *visual thinking* siswa secara klasikal dengan rata-rata skor minimal 2,65 skala 4 terpenuhi sebesar 91,18 % pada ujicoba II; b) kemampuan guru mengelola pembelajaran pada uji coba I sebesar 3,16, pada uji coba II sebesar 3,24 dengan kategori tinggi ($3 \leq \bar{P} \leq 4$); c) Aktifitas aktif siswa terpenuhi toleransi 5% pada ujicoba II. (3) Peningkatan kemampuan representasi *visual thinking* siswa paling meningkat pada indikator menyajikan masalah dalam bentuk persamaan yaitu sebesar 0,70, dilihat berdasarkan tahap ujicoba I dan II pada *pre-tes* dan *post-tes* meningkat dengan *N-gain* sebesar 0,69 kategori sedang.

Kata Kunci: Pengembangan, Perangkat Pembelajaran, CTL, Budaya Melayu, Representasi *Visual Thinking* (RVT).

ABSTRACT

JOKO MARIONO. Development of Learning Tools Based on Malay Culture and Contextual Approaches to Enhance the Capability of Visual Thinking Representation of MTs Negeri Tanjung Pura Students. Medan: Postgraduate Mathematics Education Study Program, Medan State University, 2019.

This study aims to determine: (1) the practicality of learning tools based on Malay culture and contextual approaches to improve the visual representation ability of thinking students of MTs Negeri Tanjung Pura. Based on the results of trial I, trial II learning tools based on Malay Culture and the Contextual Approach developed were fulfilled practically, in terms of: a) Teacher's response to the devices fulfilled an average score of 3.16 in both categories; b) Student responses to the device meet an average score of 3.08 in both categories. (2) the effectiveness of learning tools in terms of: a) Completion of learning the ability of students' visual representation of classical thinking with an average score of at least 2.65 scale 4 fulfilled 91.18% in the second trial; b) the ability of teachers to manage learning in first trial was 3.16, in second trial it was 3.24 with a high category ($3 \leq P \leq 4$); c) Active activities of students fulfilled tolerance of 5% on second trial. (3) Increasing the ability of visual representation of students thinking the most increased on the indicator presents a problem in the form of an equation that is equal to 0.70, seen based on the testing stages I and II in the pre-test and post-test increased with an N-gain of 0.69 in the medium category.

Keywords: Development, Learning Tools, CTL, Malay Culture, Representation of Visual Thinking (RVT)