

ABSTRAK

RIAN AGUSMAR. Pengembangan Perangkat Pembelajaran Problem Posing Masalah Untuk Meningkatkan Kemampuan Penalaran Matematis dan *Self Efficacy* Siswa SMP Negeri 2 Bangkinang Kota. Tesis. Medan: Program Studi Pendidikan Matematika Pasca Sarjana Universitas Negeri Medan, 2019

Penelitian ini bertujuan untuk menganalisis: (1) peningkatan kemampuan penalaran matematis siswa dengan menggunakan perangkat pembelajaran *problem posing*, (2) peningkatan *self efficacy* siswa dengan menggunakan perangkat pembelajaran *problem posing*, (3) efektivitas perangkat pembelajaran *problem posing* yang dikembangkan untuk meningkatkan kemampuan penalaran matematis dan *self-efficacy* siswa, dan (4) kepraktisan perangkat pembelajaran *problem posing* yang dikembangkan untuk meningkatkan kemampuan penalaran matematis dan *self-efficacy* siswa. Pengembangan perangkat pembelajaran berorientasi model pembelajaran berbasis masalah ini menggunakan model pengembangan 4-D. Tahapan penelitian ini adalah *define, design, develop, dan disseminate*. Subjek dalam penelitian ini adalah siswa kelas VIII¹ dan VIII² SMP Negeri 2 Bangkinang Kota. Dari hasil uji coba I dan uji coba II diperoleh: (1) terdapat peningkatan kemampuan penalaran matematis siswa pada posttest uji coba I dan uji coba II sebesar 7 point, (2) terdapat peningkatan rata-rata *self-efficacy* siswa pada angket uji coba I dan uji coba II sebesar 0,19 point, (3) validitas perangkat pembelajaran menurut tim ahli adalah valid, dan keefektifan perangkat pembelajaran telah memenuhi kriteria efektif ditinjau dari: a) ketuntasan belajar siswa secara klasikal; b) ketercapaian tujuan pembelajaran; c) respon siswa terhadap komponen-komponen perangkat pembelajaran dan kegiatan pembelajaran positif, (4) kepraktisan perangkat pembelajaran telah memenuhi kriteria praktis ditinjau dari: a) validator menyatakan perangkat pembelajaran dapat digunakan revisi kecil; b) hasil pengamatan keterlaksanaan perangkat pembelajaran telah dapat dikatakan baik

Kata Kunci : Perangkat Pembelajaran, Model Pengembangan 4-D, Problem Posing , Kemampuan Penalaran Matematis, dan Self Efficacy



ABSTRACT

RIAN AGUSMAR. Development of Learning Material on Problem Posing to Increase Mathematical Reasoning Ability and Self-Efficacy Students of SMP Negeri 2 Bangkinang Kota. A Thesis. Medan: Post Graduate Program, State University of Medan, 2019.

This research aim to analysis: (1) the increasing of students' mathematical reasoning ability by using learning material on problem posing that has been developed, (2) the increasing of students' self-efficacy by using learning material on problem posing that has been developed, (3) the effectiveness of learning material developed on problem posing to increase students' mathematical reasoning ability and self efficacy, and (4) the practicality of learning material developed on problem posing to increase students' mathematical reasoning ability and self efficacy. The development of learning problem posing by using the 4-D development model. The stage of this research includes define, design, develop, and disseminate. The subjects of this research were students of class VIII¹ and VIII² SMP Negeri 2 Bangkinang Kota. From the results of trial I and trial II were obtained: (1) there was an increase in students' mathematical reasoning ability on posttest trials I and trials II of 7 point, (2) there was an increase in students' self efficacy on posttest trials I and trials II of 0,19 point, (3) according to the expert, the validity of learning material is valid, the effectiveness of learning material has fulfilled the effective criteria in terms of: a) the mastery of students learning in classical; b) limits of tolerance that have been established on students' active activity; c) students' responses is positive to the components of learning materials and learning activities, and (4) the practicality of the learning material has fulfilled the practical criteria that have reviewed from: a) the validator stated the learning materials can be used with a little revisions; b) the result of observation of learning material has been done as said good

Keywords: Learning Materials, 4-D Development Model, Problem Posing, Mathematical Reasoning Abilities, and Self-Efficacy

