

ABSTRAK

CANDRA WIDODO. Pengembangan Perangkat Pembelajaran Berdasarkan Pembelajaran Berbasis Masalah Untuk Meningkatkan Kemampuan Penalaran Matematik dan *Self-efficacy* Siswa MTs Nurul Hikmah Tinjowan. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan (UNIMED), 2016.

Penelitian ini bertujuan untuk : (1) Menganalisis validitas perangkat pembelajaran berdasarkan pembelajaran berbasis masalah yang dikembangkan terhadap peningkatan kemampuan penalaran matematik dan *self efficacy* siswa, (2) Menganalisis kepraktisan perangkat pembelajaran berdasarkan pembelajaran berbasis masalah yang dikembangkan terhadap peningkatan kemampuan penalaran matematik dan *self efficacy* siswa, (3) Menganalisis efektivitas perangkat pembelajaran berdasarkan pembelajaran berbasis masalah yang dikembangkan terhadap peningkatan kemampuan penalaran matematik dan *self efficacy* siswa, (4) Menganalisis peningkatan kemampuan penalaran matematik siswa dengan menggunakan perangkat pembelajaran berdasarkan pembelajaran berbasis masalah yang telah dikembangkan, dan (5) Menganalisis *self efficacy* siswa setelah pembelajaran dengan menggunakan perangkat pembelajaran berdasarkan pembelajaran berbasis masalah yang telah dikembangkan. Jenis penelitian yang digunakan adalah penelitian pengembangan dengan menggunakan modifikasi antara model pengembangan 4-D. Tahapan penelitian ini adalah *define, design, develop* dan *disseminate*. Dalam penelitian ini disusun perangkat pembelajaran dan instrumen yaitu : RPP, LAS, buku guru, buku siswa, tes kemampuan penalaran dan angket *Self-efficacy*. Uji coba dilakukan pada siswa kelas VII-A sebanyak 22 orang dan VII-B sebanyak 23 orang di MTs Nurul Hikmah Tinjowan. Hasil penelitian ini menunjukkan bahwa : (1) Validitas perangkat pembelajaran menurut tim ahli adalah valid (2) Perangkat pembelajaran memenuhi kriteria praktis yaitu validator menyatakan perangkat pembelajaran dapat digunakan dengan revisi kecil dan Kemampuan guru dalam mengelola pembelajaran diperoleh rata-rata 4,08 berkategori baik (3) Perangkat pembelajaran memenuhi kriteria efektif yaitu ketuntasan klasikal mencapai 91,3%, respon siswa terhadap pembelajaran diperoleh rata-rata 95,02%, dan waktu pembelajaran tidak berbeda jauh dengan waktu pembelajaran biasa (4) Peningkatan kemampuan penalaran matematik dilihat dari nilai *N-gain* yaitu 0,61 dalam kategori “sedang”, dan (5) *Self efficacy* matematik siswa setelah pembelajaran menghasilkan nilai rata-rata sebesar 84,8.

Kata Kunci : Pengembangan Perangkat Pembelajaran, Pembelajaran Berbasis Masalah (PBM), Penalaran Matematik, *Self-efficacy* siswa.

ABSTRACT

CANDRA WIDODO. Development of Study Peripheral Base On The Problem Based Learning To Increase Ability of Mathematic Reasoning and Self-Efficacy of Student MTs Nurul Hikmah Tinjowan. Thesis. Medan: Graduate of the State University of Medan (UNIMED), 2016.

This research aim to : (1) To analyse validity of study peripheral base on the problem based learning which have been developed to improve the ability of mathematical reasoning and self efficacy student, (2) To analyse practical of study peripheral base on the problem based learning which have been developed to improve the ability of mathematical reasoning and self efficacy students, (3) To analyse effectiveness of study peripheral base on the problem based learning which have been developed to improve the ability of mathematical reasoning and self efficacy student, (4) To analyse the improvement of ability mathematical reasoning student by using study peripheral base on the problem based learning which have been developed, and (5) To analyse self efficacy student hereafter study by using study peripheral base on the problem based learning which have been developed. Research type used is development research by using modification of development model 4-D. This Research step is define, design, develop and disseminate. In this research is compiled by peripheral of study and instrument that is : lesson plan, sheet of student activity, teacher book, student book, tes of ability of reasoning and enquette Self-Efficacy. Try out conducted at student of class VII-A as much 22 people and VII-B as much 23 people in MTS. Nurul Hikmah Tinjowan. Result of this research indicate that : (1) Validity of study peripheral of according to expert team is valid (2) Study Peripheral reach the practical criterion that is validator express the study peripheral can be used revisedly minimize and the teacher in managing study obtained by mean 4,08 categorize the goodness (3) Study Peripheral reach the effective criterion that is complete of klasikal reach 91,3%, respon student to study obtained mean 95,02% and study time not differ far with the ordinary study time, (4) Improvement the ability of mathematical reasoning use the study peripheral base on the problem which have been developed to be seen from value N-Gain that is 0,61 in category "medium", and (5) Mathematic Self Efficacy student after study yield the average value of equal to 84,8

Keyword : Development of Study Peripheral, Proble Based Learning, Mathematic Reasoning, Self-Efficacy Student.