ABSTRAK

ANGGI PARAMITA DAULAY. Pengembangan Perangkat Pembelajaran Berbasis *Problem Based Learning* untuk Meningkatkan Kemampuan Penalaran Matematis dan *Self-Efficacy* Siswa Kelas X SMAN 1 Medan. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Oktober 2017.

Penelitian ini bertujuan untuk menganalisis: (1) Peningkatan kemampuan penalaran matematis siswa dengan menggunakan perangkat pembelajaran berbasis *problem based learning* (PBL) yang dikembangkan, (2) Peningkatan *self-efficacy* siswa dengan menggunakan perangkat pembelajaran berbasis *problem based learning* (PBL) yang dikembangkan, dan (3) Menemukan perangkat pembelajaran yang efektif dengan menggunakan perangkat pembelajaran berbasis *problem based learning* (PBL) yang dikembangkan. Penelitian ini merupakan penelitian pengembangan (*research and development*) dengan model Dick and Carey. Instrumen penelitian ini adalah Buku Guru, Buku Siswa, LKS, tes kemampuan penalaran matematis (TKPM), dan angket *self-efficacy* siswa. Uji coba I dilakukan pada siswa kelas X MIA 3 dan uji coba II di kelas X MIA 4 SMA Negeri 1 Medan. Dari hasil penelitian ini diperoleh bahwa: (1) Adanya peningkatan kemampuan penalaran matematis siswa dengan menggunakan perangkat pembelajaran yang dikembangkan, (2) Adanya peningkatan *self-efficacy* siswa dengan menggunakan perangkat pembelajaran yang dikembangkan, dan (3) Perangkat pembelajaran memenuhi kriteria keefektifan, yakni ditinjau dari: a) Ketuntasan hasil belajar siswa secara klasikal, b) Ketercapaian tujuan pembelajaran, c) waktu pembelajaran yang efesien, dan d) Respon siswa.

Kata Kunci: Pengembangan Perangkat Pembelajaran, *Problem Based Learning*, Dick and Carey, Kemampuan Penalaran matematis, *Self-Efficacy*

ABSTRACT

ANGGI PARAMITA DAULAY. Developing of Learning Material Based on Problem Based Learning to Increase Students' Mathematical Reasoning Ability and Self-Efficacy in Grade X SMA Negeri 1 Medan. Thesis. Medan: Postgraduate program of state university of Medan, October 2017.

The purpose of this research are to analyze: (1) The increase of students' mathematical reasoning ability using the developing learning materials based in the Problem-Based Learning (PBL), (2) The increase of students' self-efficacy using the developing learning materials based in the Problem-Based Learning (PBL) (3) Finding the effective learning materials using the developing learning materials based in the Problem-Based Learning (PBL). This research is a research and development with Dick and Carey Model. The instrument of this research are Teachers' Book, Students' Book, Students' Worksheet (LKS), test of mathematical reasoning ability (TKPM), and students' self-efficacy questionnaire. The first trial was done on the students of grade X MIA 3 and the second on the students of grade X MIA 4 of SMA Negeri 1 Medan. This research obtained: 1) There is an increase in students' mathematical reasoning ability using the developing learning material, (2) There is a increase in students' self-efficacy using the developing learning material, and (3) The learning material fulfill the effectiveness criteria, regarding: a) mastery of learning in a classical way, b) achievement of learning objectives, b) students' activity, c) efficient learning time and d) students' response.

Keywords: Developing Learning Materials, Problem Based Learning, Dick and Carey, Mathematical Reasoning Ability, Self-Efficacy