

## ABSTRAK

VENY RAHMAYANI BR SIHOTANG. Pengembangan Perangkat Pembelajaran Berbasis Model Pembelajaran *Problem Based Learning* Dengan Berbantuan *Book Creator* Untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Dan Kemandirian Belajar Siswa. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2023.

Penelitian ini bertujuan untuk mendeskripsikan 1) kevalidan, kepraktisan dan keefektifan perangkat pembelajaran berbasis model pembelajaran *problem based learning* dengan berbantuan *book creator* untuk meningkatkan kemampuan pemecahan masalah matematis dan kemandirian belajar siswa; 2) peningkatan kemampuan pemecahan masalah matematis dan kemandirian belajar siswa dengan menggunakan perangkat pembelajaran berbasis model pembelajaran *problem based learning* dengan berbantuan *book creator*; 3) proses jawaban yang dibuat siswa dalam menyelesaikan soal-soal tes kemampuan pemecahan masalah matematis. Penelitian ini menggunakan model pengembangan ADDIE yang terdiri dari 5 tahap *Analysis, Design, Development, Implementation, Evaluation*. Subjek dalam penelitian ini adalah siswa kelas X SMK Swasta YWKA Medan tahun ajaran 2022/2023. Hasil penelitian menunjukkan bahwa 1) Perangkat pembelajaran berbasis model pembelajaran *problem based learning* dengan berbantuan *book creator* untuk meningkatkan kemampuan pemecahan masalah dan kemandirian yang dikembangkan sudah memenuhi kriteria valid, praktis dan efektif; 2) Ada peningkatan kemampuan pemecahan masalah matematis dan kemandirian belajar siswa menggunakan perangkat pembelajaran berbasis model pembelajaran *problem based learning* dengan berbantuan *book creator* yang telah dikembangkan; 3) proses jawaban siswa pada uji coba II lebih baik dari uji coba I.

**Kata kunci:** Model Pembelajaran *Problem Based Learning*, *Book Creator*, Kemampuan Pemecahan Masalah Matematis, Kemandirian Belajar



## ABSTRACT

VENY RAHMAYANI BR SIHOTANG. The Development of Learning Devices Based on Problem Based Learning Models with the Assistance of Book Creators to Improve Students' Problem Solving Ability and Student Learning Independence. Thesis. Medan: Postgraduate Program, State University of Medan, 2023

This research aims to describe 1) the validity, practicality and effectiveness of learning tools based on problem based learning models with the help of book creators to improve students' mathematical problem solving abilities and learning independence; 2) increasing students' mathematical problem solving abilities and learning independence by using learning tools based on problem based learning models with the help of book creators; 3) the process of answers made by students in solving mathematical problem solving ability test questions. This research uses the ADDIE development model which consists of 5 stages of Analysis, Design, Development, Implementation, Evaluation. The subjects in this research were class X students of the SMK S YWKA Medan for the 2022/2023 academic year. The results of the research show that 1) The learning tools based on the problem based learning model with the help of a book creator to improve problem solving abilities and independence that have been developed have met the criteria of being valid, practical and effective; 2) There is an increase in students' mathematical problem solving abilities and learning independence using learning tools based on problem based learning models with the help of book creators that have been developed; 3) the student answer process in trial II was better than trial I.

**Keywords:** Problem Based Learning Model, Book Creator, Problem Solving Ability, Self-Learning