ABSTRAK

DONNI ANDREAS NAINGGOLAN. Pengembangan LKPD dengan Model Pembelajaran *Creative Problem Solving* Berbantuan *GeoGebra* Untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis dan Daya Juang Siswa SMK. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2024.

Penelitian ini bertujuan untuk: (1) menganalisis dan menyimpulkan LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* yang memenuhi kriteria valid untuk meningkatkan kemampuan pemecahan masalah matematis dan daya juang siswa; (2) menganalisis dan menyimpulkan LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* yang memenuhi kriteria praktis untuk meningkatkan kemampuan pemecahan masalah matematis dan daya juang siswa; (3) menganalisis dan menyimpulkan LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* yang memenuhi kriteria efektif untuk meningkatkan kemampuan pemecahan masalah matematis dan daya juang siswa; (4) mendeskripsikan peningkatan kemampuan pemecahan masalah matematis siswa setelah diajarkan menggunakan LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra*; (5) mendeskripsikan peningkatan kemampuan pemecahan masalah matematis siswa setelah diajarkan menggunakan LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra*. Penelitian ini merupakan penelitian *Research & Development* (penelitian pengembangan). Model pengembangan yang digunakan dalam penelitian ini adalah model ADDIE yaitu *Analysis* (Analisis), *Design* (Perancangan), *Development* (Pengembangan), *Implementation* (Penerapan), *Evaluation* (Evaluasi). Hasil penelitian menunjukkan bahwa: (1) LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* telah memenuhi kriteria valid; (2) LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* telah memenuhi kriteria praktis (3) LKPD yang dikembangkan dengan model pembelajaran *Creative Problem Solving* berbantuan *GeoGebra* telah memenuhi kriteria efektif; (4) peningkatan kemampuan pemecahan masalah matematis ditinjau berdasarkan *n-gain* pada uji coba I sebesar 0,224 dengan kategori rendah dan pada uji coba II sebesar 0,552 yang tergolong dalam kategori sedang; (5) daya juang siswa ditinjau berdasarkan *n-gain* pada uji coba I sebesar 0,077 dengan kategori sangat rendah (*Quitters*) dan pada uji coba II meningkat sebesar 0,181 yang tergolong dalam kategori sangat rendah (*Quitters*).

Kata Kunci: Lembar Kerja Peserta Didik (LKPD), Model Pembelajaran *Creative Problem Solving, GeoGebra,* Kemampuan Pemecahan Masalah, Daya Juang.

ABSTRACT

DONNI ANDREAS NAINGGOLAN. Development of Students' Worksheet with a Creative Problem Solving Learning Model Assisted by GeoGebra to Improve the Mathematical Problem Solving Ability and Adversity Quotient of SMK Students. Thesis. Medan: Postgraduate of Mathematics Education Study Program, State University of Medan. 2024.

This research aims to: (1) analyze and conclude the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra which fulfills the valid category to improve students' mathematical problem solving ability and adversity quotient; (2) analyze and conclude the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra which fulfills the practical category to improve students' mathematical problem solving ability and adversity quotient; (3) analyze and conclude the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra which fulfills the effective category to improve students' mathematical problem solving ability and adversity quotient; (4) describe the improvement of students' mathematical problem solving ability after taught by students' worksheet (LKPD) with a Creative Problem Solving learning model assisted by GeoGebra; (5) describe the improvement of students' adversity quotient after taught by students' worksheet (LKPD) with a Creative Problem Solving learning model assisted by GeoGebra. The research is a Research & Development. The development model used in this research is an ADDIE model, namely Analysis, Design, Development, Implementation and Evaluation. The results showed that: (1) the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra has fullfilled the valid category to improve the students' mathematical problem solving ability and adversity quotient; (2) the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra has fullfilled the practival category to improve the students' mathematical problem solving ability and adversity quotient; (3) the students' worksheet developed using a Creative Problem Solving learning model assisted by GeoGebra has fullfilled the effective category to improve the students' mathematical problem solving ability and adversity quotient; (4) the improvement of students' mathematical problem solving ability and adversity quotient as reviewed based on the n-gain in the first trial was 0.224 in the low category and in the second trial, it was 0.552 which was in the medium category; (5) the students' worksheet developed using the Creative Problem Solving learning model assisted by GeoGebra can increase students' adversity quotient from 0,077 in the first trial which classified into vert low category (Quitters Stage) to 0,181 in the second trial which is also classified into very low category (Quitters Stage)

Keywords: Student's Worksheet (LKPD), Creative Problem Solving Learning Model, GeoGebra, Problem Solving Ability, Adversity Quotient.