

## ABSTRAK

**ROSMAWATY SIMATUPANG.** Analisis Kemampuan Pemecahan Masalah dan *Self-Efficacy* Siswa Pada Pembelajaran *Problem-Based Learning*. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan.

Penelitian ini bertujuan untuk menganalisis dan mengetahui: (1) tingkat kemampuan pemecahan masalah matematis siswa setelah pembelajaran *problem-based learning*, (2) kesalahan yang dilakukan siswa dalam menyelesaikan soal pemecahan masalah matematis setelah pembelajaran *problem-based learning*, (3) *self-efficacy* siswa pada pembelajaran *problem-based learning*. Subjek dalam penelitian ini adalah semua siswa SMP Tunas Baru Jin Seung Batam kelas VII-A yang berjumlah 38 siswa, kemudian untuk subjek wawancara dipilih berdasarkan tingkat kemampuan pemecahan masalah matematis berdasarkan tahapan Polya dan skala *self-efficacy* menurut dimensi Bandura. Adapun hasil penelitian sebagai berikut: (1) Kategori penilaian siswa berdasarkan tingkat kemampuan pemecahan masalah matematis dari tertinggi ke terendah secara berurutan: kemampuan tinggi 8 orang, sedang 20 orang, dan rendah 10 orang. (2) Kesalahan yang dilakukan siswa dalam menyelesaikan soal pemecahan masalah adalah siswa berkemampuan tinggi 1 orang melakukan kesalahan pada tahap melaksanakan rencana dan 3 orang salah pada tahap memeriksa kembali. Siswa berkemampuan sedang melakukan kesalahan pada tahap membuat rencana sebesar 7 orang, pada tahap melaksanakan rencana 11 orang dan tahap memeriksa kembali sebesar 20 orang. Siswa berkemampuan rendah melakukan kesalahan pada tahap membuat rencana sebesar 10 orang, pada tahap melaksanakan rencana 10 orang dan tahap memeriksa kembali sebesar 10 orang. (3) *Self-efficacy* siswa berdasarkan dimensi *Magnitude* dengan tingkat *self-efficacy* sangat tinggi sebanyak 1 orang, tingkat tinggi sebanyak 2 orang, tingkat sedang sebanyak 5 orang dan tingkat rendah sebanyak 5 orang. Dimensi *Strength* dengan tingkat *self-efficacy* tinggi sebanyak 3 orang, tingkat sedang sebanyak 8 orang, dan tingkat rendah sebanyak 6 orang. Dimensi *Generality* dengan tingkat *self-efficacy* sangat tinggi sebanyak 2 orang, tingkat tinggi sebanyak 2 orang, tingkat sedang sebanyak 3 orang, dan tingkat rendah sebanyak 1 orang.

**Kata Kunci:** analisis, kemampuan pemecahan masalah matematis, *self-efficacy*, *problem-based learning*

## ABSTRACT

**ROSMAWATY SIMATUPANG. Analysis of Problem-Solving Ability and Self-Efficacy of Students taught using Problem-Based Learning.** Thesis. Medan: Postgraduate Program, State University of Medan.

This study aims to analyse and determine: (1) the level of students' mathematical problem-solving ability after studying with problem-based learning, (2) mistakes made by students in solving mathematical problems after studying with problem-based learning, (3) students' self-efficacy after studying with problem-based learning. The subjects in this study were 38 students of the class VII-A Tunas Baru Jin Seung middle school, as for interview subjects were selected based on their level of mathematical problem-solving ability on Polya's stages and self-efficacy scale according to the Bandura dimension. The results of the study are as follows: (1) Student assessment categories are based on the level of mathematical problem-solving ability from highest to lowest sequentially: high ability of 8 people, medium 20 people, and low 10 people. (2) Mistakes made by students in completing problem-solving difficulties are one high-ability student makes a mistake at the stage of carrying out the plan and three students make errors when looking back. Seven students of moderate ability make mistakes at the stage of devising a plan, eleven students make mistakes when carrying out the plan, and twenty students when looking back. Ten students of low-ability make mistakes at the stage of devising a plan, ten other students make mistakes when carrying out the plan, and ten students make errors when looking back. (3) Self-efficacy of the students based on the Magnitude dimension with a very high level of self-efficacy of one student, a high level of two students, a moderate level of five students and a low level of five students. For the Strength dimension with a high level of self-efficacy of three students, a moderate level of eight students, and a low level of six students. For the Generality dimension with a very high level of self-efficacy of two students, a high level of two students, a moderate level of three students, and a low level of one student.

**Keywords:** analysis, mathematical problem-solving ability, self-efficacy, problem-based learning