

ABSTRACT

ARDILA SANDI. Pengembangan Bahan Ajar Berbasis Pendekatan Metakognisi Berbantuan ICT Untuk Meningkatkan kemampuan Pemecahan Masalah Dan *Self Regulated Learning* Siswa Di SMP Al Washliyah 1 Medan. Tesis. Pascasarjana Pendidikan Matematika Universitas Negeri Medan, 2020.

Penelitian ini merupakan penelitian pengembangan bahan ajar berbasis pendekatan metakognisi berbantuan ICT untuk meningkatkan kemampuan pemecahan masalah dan kemandirian belajar siswa. Bahan ajar dirancang agar memenuhi kriteria valid, praktis dan efektif. Penelitian ini dilakukan di SMP Al Washliyah 1 Medan, Indonesia. Temuan penelitian ini adalah: (1) Bahan ajar berbasis pendekatan metakognisi telah memenuhi kriteria valid, praktis, dan efektif dalam meningkatkan kemampuan pemecahan masalah matematis siswa dan mengatur diri siswa, (2) Meningkatkan pemecahan masalah dengan menggunakan bahan ajar berbasis pada pendekatan metakognisi yaitu ICT telah dikembangkan dan dibantu, terlihat dari nilai N-gain pada tes pertama 0,36 meningkat menjadi 0,50 pada tes kedua, (3) Meningkatnya kemandirian belajar siswa setelah pembelajaran menggunakan bahan ajar berbasis Pendekatan metakognisi yang telah dikembangkan dan dibantu ICT berdasarkan rata-rata keseluruhan kuesioner *self-regulated learning* pada tes pertama 2,98, meningkat pada tes kedua menjadi 3,25.

Kata kunci: pendekatan metakognisi, kemampuan pemecahan masalah, *self-regulated learning*, bahan ajar pembelajaran matematika.



ABSTRACT

ARDILA SANDI. Development of Teaching Materials Based on An ICT Assisted Metacognition Approach To Improve Students Problem Solving And Self Regulated Learning Ability in SMP Al Washliyah 1 Medan. Thesis. Medan: Post Graduate of Mathematics for Education Department of State University of Medan 2020.

This study is a research on the development of teaching materials based on the ICT-assisted metacognition approach to improve students' problem-solving and self-regulated abilities. The teaching materials were designed so that they meet the valid, practical, and effective criteria. This research was conducted at SMP Al Washliyah 1 Medan, Indonesia. The findings of this study are: (1) Teaching materials based on the metacognition approach have met valid, practical, and effective criteria in increasing students' mathematical problem solving abilities and self-regulated students, (2) Increasing problem solving using teaching materials based on metacognition approaches that are ICT has been developed and assisted, seen from the N-gain value in the first test of 0.36, increasing to 0.50 in the second test, (3) Increasing self-regulated students after learning using teaching materials based on the metacognition approach that has been developed and ICT-assisted based on the overall average of the self-regulated questionnaire in the first test of 2.98, increasing in the second test to 3.25.

Keywords: metacognition approach, problem solving ability, self-regulated, mathematics teaching tools

