ABSTRAK

DEWI ANGGRAINI. Pengembangan Modul Matematika Berbasis RME Berbantuan Autograph untuk Meningkatkan Kemampuan Pemecahan Masalah dan Koneksi Matematis Siswa SMA. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2021.

Penelitian ini bertujuan untuk mengetahui: (1) tingkat kevalidan modul matematika berbantuan autograph untuk meningkatkan kemampuan pemecahan masalah dan kemampuan koneksi matematis siswa SMA MAN 1 Deli Serdang, (2) keefektifan modul matematika berbantuan autograph untuk meningkatkan kemampuan pemecahan masalah dan kemampuan koneksi matematis siswa SMA MAN 1 deli Serdang (3) peningkatan kemampuan pemecahan masalah matematis siswa dalam penerapan modul matematika berbantuan autograph, (4) peningkatan kemampuan koneksi matematis siswa dalam penerapan modul matematika berbantuan autograph. Peneliti mengembangkan bahan ajar berupa modul matematika berbantuan autograph dengan menggunakan model pengembangan Dick & Carey. Validasi modul yang dilakukan oleh tiga orang ahli dan dua orang praktisi memperoleh nilai rata-rata total validitas adalah 4,58 dengan kriteria valid. Modul matematika berbasis RME berbantuan autograph dalam meningkatkan kemampuan pemecahan masalah dan kemampuan koneksi matematis siswa SMA MAN 1 Deli Serdang yang dikembangkan adalah efektif. Berdasarkan hasil tes kemampuan pemecahan masalah matematis pada uji coba I dan uji coba II diperoleh bahwa adanya peningkatan kemampuan pemecahan masalah matematis siswa yaitu sebesar 0,4 ke 0,5. Berdasarkan hasil tes kemampuan koneksi matematis pada uji coba I dan uji coba II diperoleh bahwa adanya peningkatan kemampuan koneksi matematis siswa yaitu sebesar 0,4 ke 0,5.

Kata Kunci: Pengembangan , Modul Matematika, RME, Autograph, Pemecahan Masalah dan Koneksi Matematis

ABSTRACT

DEWI ANGGRAINI. Development of Mathematics Module Based on RME with Autograph Assistance to Improve the Problem Solving Ability and Mathematical Connections of High School Students. Thesis. Medan: Postgraduate Mathematics Education Program State University of Medan, 2021.

The aim of this research is to know: (1) level of validity and effectiveness of autograph aided math module for improving problem solving ability and mathematical connection ability of students of SMA MAN 1 Deli Serdang, (2) improvement of mathematical problem solving ability of students in application of autograph aided math module, (3) improvement of mathematical connection ability of students in application of autograph aided math module. Researchers developed teaching materials in the form of autograph aided math module using the Dick & Carey development model. The module validation was carried out by three experts and two practitioners, the average value of the total validity was 4.58 with valid criteria. RME-based mathematics module with the help of signatures in improving the problem-solving abilities and mathematical connection abilities of students of SMA MAN 1 Deli Serdang which is developed effectively. Based on the results of the test of mathematical problem solving abilities in the first trial and the second trial, it was found that there was an increase in students' mathematical problem solving ability, namely 0.4 to 0.5. Based on the results of the mathematical connection ability test in the first trial and the second trial, it was found that there was an increase in the students' mathematical connection ability, from 0.4 to 0.5.

Keywords: Development, Mathematics Module, RME, Autograph, Problem Solving and Mathematical Connection