ABSTRAK

ARIATI DARA ANINDITA. Pengembangan Perangkat Pembelajaran Berbasis Pendekatan Matematika Realistik Berbantuan Daring untuk Meningkatkan Kemampuan Berpikir Kritis dan Adversity Quotient Siswa MAN 1 Medan. Tesis. Medan : Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan.

Penelitian ini bertujuan untuk: 1) Menghasilkan perangkat pembelajaran berbasis Pendekatan Matematika Realistik berbantuan daring yang valid untuk meningkatkan kemampuan berpikir kritis dan *adversity quotient* siswa MAN 1 Medan; (2) Menghasilkan perangkat pembelajaran berbasis Pendekatan Matematika Realistik berbantuan daring yang praktis untuk meningkatkan kemampuan berpikir kritis dan *adversity quotient* siswa MAN 1 Medan; (3) Menghasilkan perangkat pembelajaran berbasis Pendekatan Matematika Realistik berbantuan daring yang efektif untuk meningkatkan kemampuan berpikir kritis dan *adversity quotient* siswa MAN 1 Medan; 4) Menganalisis peningkatan kemampuan berpikir kritis siswa setelah menggunakan perangkat pembelajaran berbasis Pendekatan Matematika Realistik berbantuan daring siswa MAN 1 Medan; 5) Menganalisis pencapaian *adversity quotient* siswa setelah menggunakan perangkat pembelajaran berbasis Pendekatan Matematika Realistik berbantuan daring siswa MAN 1 Medan. Subjek penelitian ini adalah siswa kelas X IS-1 dan X Is-2 MAN 1 Medan tahun ajaran 2020/2021 yang masing-masing berjumlah 30 siswa. Jenis Penelitian ini adalah penelitian pengembangan. Hasil penelitian menunjukkan bahwa: 1) Perangkat pembelajaran yang dikembangkan berbasis Pendekatan Matematika Realistik Berbantuan Daring telah memenuhi kriteria valid; 2) Kemampuan berpikir kritis matematis siswa menggunakan perangkat pembelajaran berbasis pendekatan matematika realistik berbantuan daring meningkat ditinjau dari: rata-rata *N-Gain* uji coba I sebesar 0,3 pada kategori rendah dan rata-rata N-Gain uji coba II sebesar 0,6 pada kategori sedang; 3) Pencapaian kemampuan *Adversity Quotient* siswa meningkat ditinjau dari: rata-rata hasil *Adversity Response Profile* (ARP) siswa uji coba I sebesar 125,43 meningkat menjadi 154,13 pada uji coba II dan meningkat sebesar 28,70 ; 4) Perangkat pembelajaran yang dikembangkan berbasis Pendekatan Matematika Realistik Berbantuan Daring telah memenuhi kriteria praktis, 5) Perangkat pembelajaran yang dikembangkan berbasis Pendekatan Matematika Realistik Berbantuan Daring telah memenuhi kriteria efektif.

Kata kunci: Kemampuan Berpikir Kritis Matematis*, Adversity Quotient*, Pendekatan Matematika Realistik, Perangkat Pembelajaran Matematika.

ABSTRACT

ARIATI DARA ANINDITA. **Development of Learning Tools Based on Online Realistic Mathematical Approaches to Improve Critical Thinking Skills and Adversity Quotient of Students at MAN 1 Medan**. Thesis. Medan : Postgraduate Mathematics Education Study Program, State University of Medan.

This study aims to: 1) Produce online learning tools based on realistic mathematics education that are valid to improvement of critical thinking ability and adversity quotient of students at MAN 1 Medan;(2) Find online learning tools based on realistic mathematics education that are practical to improvement of critical thinking ability and adversity quotient of students at MAN 1 Medan ; (3) Find online learning tools based on realistic mathematics education that are effective to improvement of critical thinking ability and adversity quotient of students at MAN 1 Medan in 2020/2021; 4) analyze the improvement of students' critical thinking ability after using online learning tools based on the realistic mathematics education at MAN 1 Medan; 5) analyze the achievement of the adversity quotient of students after using online learning tools based on the realistic mathematics education at MAN 1 Medan. The subjects in this study were students of class X Is-1 and X Is-2 each consisting of 30 students. This type of research is development research. The results showed that: 1) Learning tools developed based on online assisted realistic mathematics education have met the criteria of validity ; 2) Students' mathematical critical thinking ability using online learning tools based on the realistic mathematics education increased in terms of: Average the N-Gain test I was 0,3 in the low category and Average N-Gain was 0,6 in the medium category in test II; 3) The ability of adversity quotient increased in terms of: the average Adversity Response Profile (ARP) results of the students in the first test of 125,43 increased to 154,13 in the second test, an increase of 28,70; 4) Learning tools developed based on online assisted realistic mathematics education have met the criteria of practicality; 5) Learning tools developed based on online assisted realistic mathematics education have met the criteria of effectiveness.

Keywords: Realistic Mathematics Education, Critical Thinking Ability, Adversity Quotient, Learning Tools