

ABSTRAK

EVI SUSTRIANI NAINGGOLAN. Peningkatan Kemampuan Berpikir Kritis dan Disposisi Matematis Siswa Melalui Model Pembelajaran Berbasis Masalah Berbantuan *Cyberlink Power Director* di SMP Budi Murni 1 Medan. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2016.

Kata Kunci: Pembelajaran Berbasis Masalah, *Cyberlink Power Director*, Berpikir Kritis, Disposisi Matematis.

Tujuan penelitian ini adalah untuk mengetahui: (1) peningkatan kemampuan berpikir kritis matematis siswa yang diajar melalui model pembelajaran berbasis masalah berbantuan *cyberlink power director* lebih tinggi dari siswa yang diajar dengan pembelajaran biasa, (2) peningkatan disposisi matematis siswa yang diajar melalui model pembelajaran berbasis masalah berbantuan *cyberlink power director* lebih tinggi dari yang diajar dengan pembelajaran biasa, (3) interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan berpikir kritis matematis siswa, (4) interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan disposisi matematis siswa. Penelitian ini merupakan penelitian kuasi eksperimen. Populasi dalam penelitian ini terdiri dari seluruh siswa SMP Budi Murni 1 Medan, dengan memilih sampel secara acak dua kelas berjumlah 68 siswa. Analisis data dilakukan dengan Anava dua jalur dan uji t satu pihak. Hasil penelitian ini menunjukkan bahwa (1) peningkatan kemampuan berpikir kritis matematis siswa yang diajar melalui model pembelajaran berbasis masalah berbantuan *cyberlink power director* lebih tinggi dari siswa yang diajar dengan pembelajaran biasa, (2) peningkatan disposisi matematis siswa yang diajar melalui model pembelajaran berbasis masalah berbantuan *cyberlink power director* lebih tinggi dari siswa yang diajar dengan pembelajaran biasa, (3) tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan berpikir kritis matematis siswa, (4) tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan disposisi matematis siswa.

ABSTRACT

EVI SUSTRIANI NAINGGOLAN. Improving on Students Critical Thinking Skills and Mathematical Disposition with Problem Based Learning Model Assisted Cyberlink Power Director in SMP Budi Murni 1 Medan. Thesis. Medan: Study Programs Postgraduate Mathematics Education State University of Medan, 2016.

Keywords: Problem Based Learning, Cyberlink Power Director, Critical Thinking, Mathematical Disposition.

The purpose of this study is to determine: (1) The increasing of students mathematics critical thinking ability whom thought by problem based learning model assisted cyberlink power director is higher than the thought by ordinary learning, (2) The increasing of students mathematical disposition whom thought by problem based learning model assisted cyberlink power director is higher than the thought by ordinary learning, (3) Interaction between the learning model and prior knowledge of mathematics students towards increasing the students mathematics critical thinking ability, (4) Interaction between the learning model and prior knowledge of mathematics students towards increasing the students mathematical disposition. This study is a quasi experiment research. The population of this study consist of all students in SMP Budi Murni 1 Medan. Randomly selected 2 classes consist of 68 sudents. The data was analyzed by using t-test and Anova two lanes. The results showed that (1) The increasing of students mathematics critical thinking ability whom thought by problem based learning model assisted cyberlink power director is higher than whom thought by ordinary learning, (2) The increasing of students mathematical disposition whom thought by problem based learning model assisted cyberlink power director is higher than whom thought by ordinary learning, (3) There is no interaction between the learning model and prior knowledge of mathematics students towards increasing the students mathematics critical thinking ability, (4) There is no interaction between the learning model and prior knowledge of mathematics students towards increasing the students mathematical disposition.

