

ABSTRAK

Rijda Anggita Sary: Peningkatan Kemampuan Berpikir Kritis Matematis Dan *Habits Of Mind* Siswa Melalui Model Pembelajaran *Double Loop Problem Solving*. Program Studi Pendidikan Matematika FKIP Universitas Malikussaleh, 2025.

Rendahnya kemampuan berpikir kritis matematis siswa juga disebabkan dengan rendahnya aspek afektif siswa yaitu *habits of mind*. Oleh karena itu, dibutuhkan suatu model pembelajaran inovatif yang mampu menstimulasi kemampuan berpikir kritis sekaligus membentuk kebiasaan berpikir yang positif pada siswa. Salah satu model pembelajaran yang dapat diterapkan yaitu model pembelajaran *Double Loop Problem Solving* (DLPS). Penelitian ini bertujuan untuk mengetahui peningkatan kemampuan berpikir kritis matematis dan *habits of mind* siswa melalui penerapan model pembelajaran *Double Loop Problem Solving* (DLPS) pada materi fungsi kuadrat. Jenis penelitian yang digunakan adalah *quasi experiment* dengan desain *nonequivalent control group*. Populasi pada penelitian ini melibatkan seluruh siswa kelas X di SMA Negeri 1 Sawang. Teknik pengambilan sampel tersebut menggunakan teknik *purposive sampling*, dimana sampel pada penelitian ini yaitu kelas X Ipas 2 yang terdiri dari 16 siswa sebagai kelompok eksperimen dan kelas X Ipas 4 yang terdiri dari 16 siswa sebagai kelompok kontrol. Instrumen penelitian berupa tes kemampuan berpikir kritis matematis dan angket *habits of mind*. Pengujian hipotesis menggunakan uji *non-parametric* yaitu uji *Mann-Whitney*. Hasil analisis hipotesis kemampuan berpikir kritis matematis menunjukkan bahwa nilai *asymptotic significance (2-tailed)* sebesar $0,042 < 0,05$ yang berarti bahwa H_0 ditolak dan H_1 diterima. Sehingga dapat disimpulkan terdapat peningkatan signifikan kemampuan berpikir kritis matematis siswa. Sedangkan hasil pengujian hipotesis *habits of mind* siswa menunjukkan bahwa nilai *asymptotic significance (2-tailed)* sebesar $0,407 \geq 0,05$ yang berarti bahwa H_0 diterima dan H_1 ditolak. Sehingga dapat disimpulkan tidak terdapat peningkatan signifikan *habits of mind* siswa. Tidak terdapatnya peningkatan *habits of mind* dikarenakan peneliti hanya menggunakan instrumen angket dan dalam waktu singkat untuk mengukur 16 indikator *habits of mind* yang ingin dimunculkan dan dikembangkan dalam pembelajaran.

Kata kunci: berpikir kritis matematis, *habits of mind*, *double loop problem solving*

ABSTRAK

Rijda Anggita Sary: *Improving Students' Critical Mathematical Thinking Skills and Habits of Mind Through the Double Loop Problem Solving Learning Model. University Malikussaleh FKIP Mathematics Education Study Program, 2025.*

The low mathematical critical thinking ability of students is also caused by the low affective aspects of students, namely habits of mind. Therefore, an innovative learning model is needed that can stimulate critical thinking abilities while forming positive thinking habits in students. One learning model that can be applied is the Double Loop Problem Solving (DLPS) learning model. This study aims to determine the improvement of students' mathematical critical thinking abilities and habits of mind through the implementation of the Double Loop Problem Solving (DLPS) learning model on quadratic function material. The type of research used is a quasi experiment with a nonequivalent control group design. The population in this study involved all grade X students at SMA Negeri 1 Sawang. The sampling technique used purposive sampling, where the sample in this study was class X Ipas 2 consisting of 16 students as the experimental group and class X Ipas 4 consisting of 16 students as the control group. The research instruments were mathematical critical thinking ability tests and habits of mind questionnaires. Hypothesis testing used a non-parametric test, namely the Mann-Whitney test. The results of hypothesis analysis for mathematical critical thinking ability showed that the asymptotic significance (2-tailed) value was $0,042 < 0,05$ which means that H_0 was rejected and H_1 was accepted. Therefore, it can be concluded that there was a significant improvement in students' mathematical critical thinking abilities. Meanwhile, the results of hypothesis testing for students' habits of mind showed that the asymptotic significance (2-tailed) value was $0,407 \geq 0,05$ which means that H_0 was accepted and H_1 was rejected. Therefore, it can be concluded that there was no significant improvement in students' habits of mind. The absence of improvement in habits of mind was due to the researcher only using questionnaire instruments in a short time to measure 16 indicators of habits of mind that were intended to be developed and fostered in learning.

Keywords: *mathematical critical thinking, habits of mind, double loop problem solving*