

## ABSTRAK

Parkumpulan, Siregar. 8216182015 Peningkatan Kemampuan Berpikir Kritis dan Minat Belajar Matematika Siswa Melalui Model *Problem Based Learning* di Kelas V SDIT Nurul Ilmi Padang Sidempuan. Program Studi Pendidikan Dasar Pascasarjana Universitas Negeri Medan 2023.

Adapun tujuan dari penelitian ini untuk mengetahui: 1) Kemampuan berpikir kritis siswa melalui model *Problem Based Learning* lebih tinggi dari siswa yang memperoleh pembelajaran biasa 2) Minat belajar matematika siswa yang memperoleh model *problem based learning* lebih tinggi dari siswa yang memperoleh pembelajaran biasa 3) Interaksi antara kemampuan awal matematik siswa dengan menerapkan model *problem based learning* terhadap peningkatan berpikir kritis siswa 4) Interaksi antara kemampuan awal matematik siswa dengan menerapkan model *problem based learning* terhadap peningkatan minat belajar matematik siswa. Jenis penelitian ini menggunakan metode kuasi eksperimen desain *Pretest-Posttest Kontrol Group Design* dengan pendekatan kuantitatif. Populasi penelitian yang terdiri dari kelas V SDIT Nurul Ilmi Padang Sidempuan yang berjumlah 120 siswa. Sampel penelitian dipilih secara *cluster random sampling* sehingga diperoleh kelas eksperimen sebanyak 30 siswa dan kelas kontrol 30 siswa. Instrumen untuk mengumpulkan data penelitian kemampuan berpikir kritis matematika siswa berbentuk tes dan mengumpulkan data minat belajar matematika siswa berbentuk angket. Hasil penelitian menunjukkan bahwa peningkatan kemampuan berpikir kritis matematika siswa yang diajarkan melalui model pembelajaran *Problem Based Learning* lebih tinggi daripada siswa yang diajarkan dengan pembelajaran biasa. Hal ini dilihat dari rerata N-gain ternormalisasi dengan nilai  $0,98 < g \leq 0,79$ . Demikian pula peningkatan minat belajar matematika siswa yang diajarkan melalui model pembelajaran *Problem Based Learning* lebih tinggi daripada siswa yang diajarkan dengan pembelajaran biasa. Ini terlihat dari uji *Mann-Whitney* menghasilkan nilai sebesar  $0,016 < 0,05$  artinya terdapat perbedaan bermakna antara dua kelompok pembelajaran. adapun interaksi pembelajaran dengan kemampuan awal siswa diketahui bahwa kedua faktor tersebut saling memberikan kontribusi secara bersamaan pada peningkatan berpikir kritis matematik siswa dan minat belajar siswa.

Katakunci: Berpikir Kritis, Minat Belajar Matematika, *Problem Based Learning*



## ABSTRACT

Parkumpulan, Siregar. 8216182015. Improving Students Critical Thinking Ability and Interest in Learning Mathematics Through a Problem Based Learning Model in Class V SDIT Nurul Ilmi Padang Sidempuan. Medan State University Postgraduate Program 2023.

The purpose of this study is to describe: 1) Students' critical thinking skills through the Problem Based Learning model are higher than students who receive ordinary learning 2) The interest in learning mathematics of students who obtain the problem based learning model is higher than students who receive ordinary learning 3) Interaction between students' initial mathematical abilities by applying problem based learning models to increasing students' critical thinking 4) Interaction between students' early mathematical abilities by applying problem based learning models to increasing students' interest in learning mathematics. This type of research uses a quasi experimental method with a pretest-posttest kontrol group design with a quantitative approach. The research population consisted of class V SDIT Nurul Ilmi Padang Sidempuan, totaling 120 students. The research sample was selected by cluster random sampling in order to obtain an experimental class of 30 students and a kontrol class of 30 students. The instrument for collecting research data on students' critical thinking skills in mathematics was in the form of a test and collecting data on students' interest in learning mathematics was in the form of a questionnaire. The results showed that the increase in students' mathematical critical thinking skills taught through the Problem Based Learning learning model was higher than students taught by ordinary learning. This can be seen from the normalized N-gain average with a value of  $0.98 < g \leq 0.79$ . Likewise, the increase in students' interest in learning mathematics taught through the Problem Based Learning learning model is higher than students taught by ordinary learning. This can be seen from the Mann-Whitney test yielding a value of  $0.016 < 0.05$  meaning that there is a significant difference between the two learning groups. As for the interaction of learning with students' initial abilities, it is known that these two factors contribute simultaneously to increasing students' critical thinking mathematics and students' learning interest.

Keywords: Critical Thinking Ability, Mathematics Learning Interest, Problem Based Learning

