

ABSTRAK

Muhammad Nazipurrahman, 2025. *Pengaruh Penerapan Model Pembelajaran Problem Based Learning, Discovery Learning dan Direct Intruction Terhadap Kemampuan Berpikir Kritis Matematika Ditinjau Dari Motivasi Belajar Siswa*. Tesis, Program Studi Magister Pendidikan Matematika, Pascasarjana, Universitas Jambi. Pembimbing: (1) Prof. Dr.Drs. Syaiful, M.Pd, (II) Prof. Drs. Maison, M.Si.,Ph.D.

Kata kunci : *Problem Based Learning, Discovery Learning*, Kemampuan Berpikir Kritis, Motivasi Belajar

Penelitian ini dilatarbelakangi karena rendahnya kemampuan matematis siswa mengenai berpikir kritis dan motivasi belajar. Adapun tujuan dalam penelitian ini yaitu: (1) Untuk mengetahui pengaruh penerapan model *Problem Based Learning* terhadap kemampuan berpikir kritis matematis siswa ditinjau dari motivasi belajar tinggi, sedang, rendah dan secara keseluruhan. (2) Untuk mengetahui pengaruh penerapan model *Discovery Learning* terhadap kemampuan berpikir kritis matematis siswa ditinjau dari motivasi belajar tinggi, sedang, rendah dan secara keseluruhan. (3) Untuk mengetahui pengaruh penerapan model *Direct Intruction* terhadap kemampuan berpikir kritis matematis siswa ditinjau dari motivasi belajar tinggi, sedang, rendah dan secara keseluruhan. (4) Untuk mengetahui interaksi antara penerapan model *Problem Based Learning* (PBL), *Discovery Learning*, dan *Direct Intruction* (DI) dengan motivasi belajar terhadap kemampuan berpikir kritis matematis siswa. Metode penelitian yang digunakan Quasi Eksperimen. Populasi yaitu siswa kelas VII A, B dan C dengan total masing-masing kelas yaitu 25 orang. Teknik analisis data dengan *two way anova* dengan instrumen angket motivasi belajar dan tes kemampuan berpikir kritis. Hasil penelitian menunjukkan bahwa: model pembelajaran PBL berpengaruh lebih tinggi dibandingkan model pembelajaran DL. Namun, model pembelajaran DL berpengaruh lebih tinggi dibandingkan model pembelajaran DI. Motivasi belajar yang tinggi efektif mempengaruhi kemampuan berpikir kritis matematis dibandingkan dengan motivasi belajar sedang, namun motivasi sedang lebih efektif pula dibandingkan motivasi belajar rendah. Terdapat interaksi antara model pembelajaran PBL, DL, dan DI dengan motivasi belajar dalam mempengaruhi kemampuan berpikir kritis matematis siswa. Artinya penerapan model pembelajaran PBL, DL, dan DI dengan motivasi belajar (tinggi, sedang, dan rendah) secara bersama-sama memiliki interaksi dalam mempengaruhi kemampuan berpikir kritis matematis siswa.

ABSTRACT

Muhammad Nazipurrahman, 2025. *The Effect of Implementing Problem Based Learning, Discovery Learning and Direct Instruction Learning Models on Critical Thinking Skills in Mathematics Reviewed from Students' Learning Motivation*. Thesis, Master of Mathematics Education Study Program, Postgraduate, Jambi University. Advisor: (I) Prof. Dr. Drs. Syaiful, M.Pd, (II) Prof. Drs. Maison, M.Si.,Ph.D.

Keywords: *Problem Based Learning, Discovery Learning, Critical Thinking Skills, Learning Motivation*

This research is motivated by the low mathematical ability of students regarding critical thinking and learning motivation. The objectives of this study are: (1) To determine whether there is an effect of the application of the Problem Based Learning model on students' mathematical critical thinking skills in terms of high, medium, low and overall learning motivation. (2) To determine whether there is an effect of the application of the Discovery Learning model on students' mathematical critical thinking skills in terms of high, medium, low and overall learning motivation. (3) To determine whether there is an effect of the application of the Direct Instruction model on students' mathematical critical thinking skills in terms of high, medium, low and overall learning motivation. (4) To determine whether there is an interaction between the application of the Problem Based Learning (PBL), Discovery Learning, and Direct Instruction (DI) models with learning motivation on students' mathematical critical thinking skills. The research method used is Quasi Experiment. The population is students in grades VII A, B and C with a total of 25 people in each class. Data analysis technique with two way anova with learning motivation questionnaire instrument and critical thinking ability test. The results of the study showed that: PBL learning model has a higher influence than DL learning model. However, DL learning model has a higher influence than DI learning model. High learning motivation effectively influences mathematical critical thinking ability compared to moderate learning motivation, but moderate motivation is also more effective than low learning motivation. There is an interaction between PBL, DL, and DI learning models with learning motivation in influencing students' mathematical critical thinking ability. This means that the application of PBL, DL, and DI learning models with learning motivation (high, moderate, and low) together have an interaction in influencing students' mathematical critical thinking ability.

