

ABSTRAK

Dini Apriani (2024), “Penerapan Model *Problem Based Learning* Untuk Meningkatkan Kemampuan Berpikir Kritis Matematis Dan *Self confidence* Siswa SMP”.

Penelitian ini bertujuan untuk menelaah Penerapan Model *Problem Based Learning* untuk Meningkatkan Kemampuan Berpikir Kritis Matematis Siswa dan *Self confidence* Siswa SMP, adapun metode yang digunakan pada penelitian ini yaitu; *Mix Method The Sequential Explanatory* yang tahapannya sudah disesuaikan, Subjek pada penelitian ini adalah Peserta didik kelas VIII yang berlokasi di Kota Kabupaten Bandung dengan jumlah 60 orang Peserta didik. Adapun hasil pada penelitian itu diantaranya; 1) Peningkatan kemampuan kemampuan Berpikir Kritis matematis siswa yang mendapat Model *Problem Based Learning* melalui berbantuan media lebih baik dari pembelajaran biasa ditunjukkan dengan rata-rata *pretest* kelas eksperimen sebesar 58,04 dan kelas kontrol sebesar 52,32. Rata-rata *posttest* pada kelas eksperimen sebesar 72,96 dan kelas kontrol sebesar 56,98. Dengan hasil tersebut kelas eksperimen mengalami peningkatan yang cukup signifikan dibandingkan dengan kelas kontrol pada tes kemampuan Berpikir Kritis matematis. Dilihat dari N-Gain atau peningkatan sebelum dan sesudah untuk kelas eksperimen mendapatkan skor sebesar 0,76 yang masuk dalam kategori tinggi dan kelas kontrol sebesar 0,48 yang masuk dalam kategori sedang. 2) Pengaruh dari *Self confidence* Siswa terhadap kemampuan Berpikir Kritis matematis yang mendapat Model *Problem Based Learning*. dari hasil analisis Karena 0,080 lebih besar dari 0,05 maka hasil uji linieritas data *Self confidence* dan kemampuan Berpikir Kritis matematis siswa memiliki hubungan yang linear serta data diperoleh bahwa nilai R (korelasi) sebesar 0,752 dan nilai *R square* (koefisien determinasinya) sebesar 0,565. Tabel di atas juga menunjukkan bahwa terdapat pengaruh antara *Self confidence* terhadap kemampuan Berpikir Kritis matematis sebesar 56,5%. 3) Proses penerapan pendekatan *Problem Based Learning* dan dengan pada pembelajaran siswa SMP maka pembelajaran matematika yang dilakukan oleh peneliti sudah sesuai dengan Model PBL menggunakan langkah-langkah: (1) Menyajikan Masalah, (2) Mengorganisasi siswa Belajar, (3) Memberikan Bimbingan belajar, (4) Membuat Karya (5) Persentasi dan Evaluasi. 4) Efektivitas penerapan Model pendekatan *Problem Based Learning* dan dalam meningkatkan kemampuan Berpikir Kritis matematis dan *Self confidence* Siswa Dengan perolehan nilai terendah diperoleh siswa pada pada indikator Memeriksa kembali hasil dan proses kerja yang di peroleh sebesar 59,74, dan nilai tertinggi yang didapatkan adalah 82,42% pada indikator Menyelesaikan rencana dengan prosedur yang jelas, hal ini berarti siswa sudah mampu menyelesaikan suatu permasalahan matematika dengann menggunakan rencana yang jelas serta terarah dalam memecahkan masalah, serta diketahui bahwa nilai rata-rata sebesar 78,73% dengan kategori efektif. Hal ini menyatakan penerapan Model pendekatan *Problem Based Learning* dan dalam meningkatkan kemampuan Berpikir Kritis matematis dan *Self confidence* Siswa

efektif untuk digunakan dalam proses peningkatan kemampuan Berpikir Kritis matematis siswa. Kendala yang dihadapi oleh guru dan siswa dalam melaksanakan pembelajaran dengan Model *Problem Based Learning* dan dengan.

Kata Kunci; *Problem Based Learning, Self confidence*, Kemampuan Berpikir Kritis Matematis,

ABSTRACT

Dini Apriani (2024), "Application of the Problem Based Learning Model to Improve Mathematical Critical Thinking Abilities and Self-confidence of Middle School Students "

This research aims to examine the application of the Problem Based Learning Model to Improve Students' Critical Mathematical Thinking Ability and Self-confidence in Middle School Students. The method used in this research is; Mix Method The Sequential Explanatory whose stages have been adjusted. The subjects in this research were class VIII students located in Bandung Regency City with a total of 60 students. The results of the research include; 1) Increasing the mathematical Critical Thinking abilities of students who receive the Problem Based Learning Model through media assistance is better than ordinary learning as shown by the pretest average of the experimental class being 58.04 and the control class being 52.32. The posttest average in the experimental class was 72.96 and the control class was 56.98. With these results, the experimental class experienced a significant improvement compared to the control class in the mathematical Critical Thinking ability test. Judging from the N-Gain or increase before and after, the experimental class got a score of 0.76 which was in the high category and the control class was 0.48 which was in the medium category. 2) The influence of students' self-confidence on mathematical critical thinking abilities that receive the Problem Based Learning Model. From the results of the analysis, because 0.080 is greater than 0.05, the results of the linearity test data for students' self-confidence and mathematical critical thinking abilities have a linear relationship and the data shows that the R value (correlation) is 0.752 and the R square value (coefficient of determination) is 0.565. The table above also shows that there is an influence between Self-confidence on mathematical Critical Thinking abilities of 56.5%. 3) The process of implementing the Problem Based Learning approach and with junior high school students' learning, the mathematics learning carried out by researchers is in accordance with the PBL Model using the steps: (1) Presenting problems, (2) Organizing student learning, (3) Providing study guidance, (4) Creating work (5) Presentations and evaluations. 4) The effectiveness of implementing the Problem Based Learning approach model and in improving students' mathematical Critical Thinking abilities and Self-confidence. With the lowest score obtained by students on the indicator of Checking back the results and work processes, the score obtained was 59.74, and the highest score obtained was 82.42 % on the indicator Completing the plan with clear procedures, this means that students have been able to solve a mathematical problem by using a clear and directed plan in solving the problem, and it is known that the average score is 78.73% in the effective category. This states that the application of the Problem Based Learning approach model and in improving students' mathematical Critical Thinking abilities and Students' Self-confidence is effective for use in the process of improving students' mathematical Critical Thinking abilities. Obstacles faced by teachers and students in carrying out learning using the Problem Based Learning Model and with

Keywords; *Problem Based Learning, Self confidence,* Mathematical Problem Solving.