

ABSTRAK

Penelitian ini mengkaji tentang pembentukan kemampuan berpikir kritis siswa dalam pembelajaran IPA materi panas dan perpindahannya. Adapun tujuan dari penelitian ini, yaitu: (a) peningkatan kemampuan berpikir kritis siswa kelas V Sekolah Dasar melalui model *project based learning*, (b) mengetahui kesulitan siswa dalam meningkatkan kemampuan berpikir kritis menggunakan model *project based learning*, dan (c) mengetahui kendala yang dihadapi oleh guru dalam penerapan model *project based learning*. Metode penelitian yang digunakan adalah *mix method* dengan desain *explanatory sequential*. Penelitian ini dilakukan di salah satu Sekolah Dasar di Kecamatan Cikalongwetan dengan jumlah partisipan sebanyak 29 siswa dan 1 guru kelas. Pada model ini suatu kelompok diberi perlakuan dan selanjutnya diberi observasi hasil dan proses. Adapun teknik pengumpulan data pada penelitian ini menggunakan lembar observasi, angket respon siswa dan wawancara guru. Teknik analisis data menggunakan uji normalitas, uji homogenitas, uji homogenitas, uji N-gain dan uji sample-t berbantuan aplikasi SPSS 25. Berdasarkan hasil penelitian bahwa: (a) model pembelajaran Project Based Learning dalam meningkatkan berpikir kritis siswa mengalami peningkatan, dilihat dari uji N-Gain dengan skor terbesar 0,63 dengan kategori sedang dengan presentase nilai pretest 31% dan mengalami peningkatan sebanyak 44% pada hasil posttest yaitu 75%. Model pembelajaran dikatakan efektif jika nilai N-gain score yang didapat $>0,3$ pada kategori sedang, (b) siswa menunjukkan respon yang baik selama menggunakan model Project Based Learning berdasarkan hasil angket siswa, (c) kendala guru dalam pembelajaran menggunakan model Project Based Learning yaitu kurangnya kekompakan kelompok serta guru sulit mengontrol siswa yang tidak membantu teman kelompoknya karena sibuk dengan individu masing-masing

Kata Kunci: *Project Based Learning*, Berpikir Kritis

ABSTRACT

This research examines the formation of students' critical thinking abilities in learning science and its transfer material. The objectives of this research are: (a) improving the critical thinking skills of fifth grade elementary school students through the project based learning model, (b) knowing the difficulties students have in improving their critical thinking skills using the project based learning model, and (c) knowing the obstacles that arise. faced by teachers in implementing the project based learning model. The research method used is a mix method with a sequential explanatory design. This research was conducted in one of the elementary schools in Cikalongwetan District with a total of 29 students and 1 class teacher as participants. In this model a group is given treatment and then given observations of the results and process. The data collection techniques in this research used observation sheets, student response questionnaires and teacher interviews. Data analysis techniques use normality test, homogeneity test, homogeneity test, N-gain test and sample-t test assisted by the SPSS 25 application. Based on the research results that: (a) the Project Based Learning learning model in improving students' critical thinking has increased, as seen from N-Gain test with the largest score of 0.63 in the medium category with a pretest score percentage of 31% and an increase of 44% in the posttest results, namely 75%. The learning model is said to be effective if the N-gain score obtained is >0.3 in the medium category, (b) students show a good response while using the Project Based Learning model based on the results of the student questionnaire, (c) teacher obstacles in learning using the Project Based model Learning is a lack of group cohesion and teachers find it difficult to control students who do not help their group friends because they are busy with their own individuals

Keywords: *Project Based Learning*, Critical Thinking