

PENINGKATAN KEMAMPUAN BERPIKIR KRITIS DAN PENALARAN SISWA SMP MELALUI MODEL PEMBELAJARAN *PROBLEM BASED LEARNING* (PBL) PADA KONSEP PEMANASAN GLOBAL

Ade Supriatna

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Abstrak

Penelitian ini bertujuan untuk menghasilkan informasi mengenai bagaimana peningkatan kemampuan berpikir kritis dan penalaran siswa, serta bagaimana tanggapan siswa terhadap pembelajaran konsep pemanasan global melalui model pembelajaran *Problem Based Learning* (PBL). Sampel penelitian adalah siswa Sekolah Menengah Pertama (SMP) kelas IX (Sembilan) sebanyak 220 siswa. Metode penelitian yang digunakan yaitu *quasi eksperimen* dengan desain penelitian *pre test – post test control group design*. Instrumen penelitian yang digunakan berupa survei dan kuesioner. Data penelitian berupa nilai *pre test*, *post test* dan *N-gain*, data tersebut dianalisis secara statistik menggunakan uji Mann-Whitney. Data tanggapan siswa dianalisis secara deskriptif. Hasil penelitian menunjukkan model pembelajaran *Problem Based Learning* (PBL) dapat meningkatkan kemampuan berpikir kritis dan penalaran siswa. Peningkatan kemampuan berpikir kritis dan penalaran siswa yang mengalami pembelajaran menggunakan model *Problem Based Learning* (PBL) lebih tinggi dan berbeda signifikan dengan siswa yang mengalami pembelajaran tidak menggunakan model *Problem Based Learning* (PBL). Data hasil kuesioner menunjukkan 78,4 % siswa menyatakan persetujuannya bahwa model pembelajaran *Problem Based Learning* (PBL) dapat meningkatkan kemampuan berpikir kritis, 77,9% siswa menyatakan persetujuannya bahwa model pembelajaran *Problem Based Learning* (PBL) dapat meningkatkan kemampuan penalaran siswa, dan 79,9% siswa menyatakan persetujuannya bahwa model pembelajaran *Problem Based Learning* (PBL) dapat diterapkan untuk pembelajaran konsep pemanasan global.

Kata kunci: *Berpikir kritis, penalaran, Problem Based Learning (PBL), pemanasan global.*

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THE IMPROVEMENT OF JUNIOR SECONDARY SCHOOL STUDENTS' CRITICAL THINKING AND REASONING SKILL THROUGH PROBLEM BASED LEARNING (PBL) MODEL ON GLOBAL WARMING CONCEPT

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Abstract

The aim of this research is to analyze how is improvement of students' critical thinking and reasoning skill, also their responses towards instruction of global warming concept through Problem Based Learning (PBL) model. Sample of this research consist of 9th grade of junior secondary school students as much as 220 students. Method that was used in this research is quasi experiment with pre test – post test control group design. Research data that were collected consist of pre test, post test score and N-gain score, data were analyzed statistically through Mann-Whitney test. Students' response data were analyzed descriptively. The result shows that Problem Based Learning (PBL) improved students' critical thinking and reasoning skill. The improvement of students' critical thinking and reasoning skill that learn through Problem Based Learning (PBL) was higher and significantly different with students who did not learn through Problem Based Learning (PBL). Questionnaire data shows that Data 78,4 % of students stated their agreement that Problem Based Learning (PBL) could improve critical thinking skill, 77,9% of students stated their agreement that Problem Based Learning (PBL) could improve their reasoning skill, and 79.9% students agreed that Problem Based Learning (PBL) can be applied to instruction of global warming concept.

Keywords :critical thinking, reasoning, problem based learning (PBL), global warming

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