

**PENGARUH MODEL *PROBLEM BASED LEARNING* (PBL)
TERHADAP KEMAMPUAN BERPIKIR TINGKAT TINGGI
IPA TERPADU DAN KEMANDIRIAN BELAJAR SISWA
DI SMP WIDIATMIKA**

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ABSTRAK

Kemampuan berpikir tingkat tinggi dan kemandirian belajar merupakan bagian dari penguatan pendidikan karakter (PPK) dan keterampilan Abad 21 yang harus dicapai siswa pada mata pelajaran di jenjang pendidikan dasar. Tujuan dari penelitian ini adalah untuk mendeskripsikan perbedaan kemampuan berpikir tingkat tinggi IPA terpadu dan kemandirian belajar siswa kelas VII di SMP Widiatmika antara kelas yang menggunakan model pembelajaran *Problem Based Learning* (PBL) dengan kelas yang menggunakan *direct instruction*. Penelitian ini menggunakan metode *quasi experiment*. Desain penelitian yang digunakan adalah *pretest-posttest control group design*. Populasi penelitian ini sejumlah 125 siswa. Jumlah sampel dalam penelitian ini adalah 63 orang yang diambil dengan metode *cluster random sampling*. Penelitian ini menggunakan dua instrumen, yaitu tes kemampuan berpikir tingkat tinggi IPA Terpadu dan angket kemandirian belajar siswa. Analisis data yang digunakan adalah *Multivariate Analysis of Covariate (Manova)* dengan pengujian hipotesis menggunakan taraf signifikansi 0,05. Hasil penelitian menunjukkan bahwa: (1) terdapat perbedaan yang signifikan secara simultan penerapan pembelajaran *Problem Based Learning* (PBL) terhadap kemampuan berpikir tingkat tinggi IPA Terpadu dan kemandirian belajar siswa nilai $F = 6,530$ dan nilai $\text{sig.} = 0.003$ dengan taraf signifikansi 0,05. (2) terdapat perbedaan yang signifikan penerapan pembelajaran *Problem Based Learning* (PBL) terhadap kemampuan berpikir tingkat tinggi IPA Terpadu dengan nilai $F = 10,200$ dan nilai $\text{sig.} = 0.002$ dengan taraf signifikansi 0,05. (3) terdapat perbedaan yang signifikan penerapan pembelajaran *Problem Based Learning* (PBL) terhadap kemandirian belajar siswa dengan nilai $F = 4,170$ dan nilai $\text{sig.} = 0.046$ dengan taraf signifikansi 0,05. Berdasarkan temuan-temuan tersebut dapat disimpulkan, bahwa terdapat perbedaan yang signifikan penerapan model pembelajaran *Problem Based Learning* (PBL) terhadap kemampuan berpikir tingkat tinggi IPA Terpadu dan kemandirian belajar siswa kelas VII di SMP Widiatmika.

Kata-kata kunci: PBL, kemampuan berpikir tingkat tinggi, kemandirian belajar siswa.

**THE EFFECT OF *PROBLEM BASED LEARNING* (PBL)
MODEL ON HIGH ORDER THINKING SKILLS IN
INTEGRATED SCIENCE AND STUDENTS' SELF-LEARNING
IN WIDIATMIKA JUNIOR HIGH SCHOOL**

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ABSTRAC

High order thinking skills and self-learning are part of character education (PPK) and 21st century skills which must be achieved by students in primary education. The aim of this research is to describe the differences of high order thinking skills in integrated science and students' self-learning of seventh grade students of Widiatmika Junior High School between the class which used Problem Based Learning (PBL) model and the class which used direct instruction model. This research used quasi experiment method and the design of this research is pretest-posttest control group design. The sample of this research was 63 students which were taken by using cluster random sampling method. Two instruments were used in this research, that were the high order thinking skills test in integrated science and the questionnaire of students' self-learning. The data were analyzed using Multivariate Analysis of Covariate (Manova) with hypothesis test using significance level 0,05. The result of this research showed that: (1) there was significant difference of implementing *Problem based learning* model on high order thinking skill in integrated science and students' self-learning $F = 6,530$ and sig value = 0.003 at significance level 0,05. (2) there was significant difference of implementing Problem based learning model on high order thinking skills in integrated science $F = 10,200$ and sig value = 0.002 at significance level 0,05. (3) there was significant difference in implementing *Problem based learning* model on students' self-learning $F = 4.170$ and sig value = 0.046 at significance level 0,05. Based on the data obtained, it can be concluded that there was significant difference in implementing Problem based learning (PBL) model on high order thinking skills in integrated science and students' self-learning of seventh grade students of Widiatmika Junior High School.

Keywords: PBL, high order thinking skill, student's self-learning