

PENERAPAN PENDEKATAN SCIENTIFIC DAN MODEL PROBLEM BASED LEARNING (PBL) UNTUK MENINGKATKAN HASIL BELAJAR BIOLOGI MATERI SEL

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ABSTRACT

The research is a Classroom Action Research with the subject of 38 students of class XI IPA 4. The research is aimed at improving the learning outcome of biology subject with the implementation of scientific approach and Problem Based Learning (PBL) model. The research was conducted in two cycles. There were 4 steps in a cycle: planning, doing, observing, and reflecting. There was an evaluation after each cycle by using an instrument that had been validated and tested for its reliability and its difficulty level. The research result shows the scientific approach and Problem Based Learning (PBL) model can improve the learning outcome of biology subject. It can be seen from the average score of class XI IPA 4 which is 65,3 or 41% from 39 students. In the first cycle, it became 74,4 or about 61%. The average score improved in the second cycle into 86,2 with the completeness of 84% from 38 students. Besides cognitive, the learning outcome was also measured from affective and psychomotor sides. The research result shows that the average score of students' affective in cycle I is 74,2 and cycle II is 84,2 while the average score of psychomotor aspect in cycle I is 74,3 and improved in cycle II into 80,4. Based on the result achieved, it can be inferred that the effort of improving the learning outcome of biology subject at the class of XI IPA 4 of SMA Negeri 10 Bogor using Scientific approach and Problem Based Learning (PBL) model is successful.

Keywords: Scientific Approach, Problem Based Learning (PBL) model and the learning outcomes of cognitive, affective, and psychomotor aspects.

ABSTRAK

Penelitian ini merupakan Penelitian Tindakan Kelas (*Classroom Action Research*), dengan subjek sebanyak 38 siswa kelas XI IPA 4. Penelitian ini bertujuan untuk meningkatkan hasil belajar Biologi dengan menggunakan pendekatan *Scientific* dan Model *Problem Based Learning* (PBL). Proses penelitian dilakukan dalam dua siklus. Setiap siklus ada 4 tahap: perencanaan tindakan, pelaksanaan tindakan, observasi, dan refleksi. Setiap akhir siklus dilakukan evaluasi dengan instrumen yang telah diuji validitas item tes, uji reliabilitas item tes, dan tingkat kesukaran butir soal. Hasil penelitian menunjukkan pendekatan *Scientific* dan Model *Problem Based Learning* (PBL) dapat meningkatkan hasil belajar Biologi. Terlihat dari hasil rata-rata nilai hasil belajar siswa kelas XI IPA 4 yaitu 65,3 atau 41% dari 39 siswa. pada siklus I menjadi 74,4 atau sekitar 61%. Rata-rata pada siklus II meningkat menjadi 86,2 dengan ketuntasan 84% dari 38 siswa. selain ranah kognitif, hasil belajar yang dinilai yaitu ranah afektif dan psikomotor. Hasil penelitian menunjukkan hasil rata-rata afektif siswa pada siklus I sebesar 74,2 dan siklus II sebesar 84,2 sedangkan rata-rata nilai aspek psikomotor siswa siklus I sebesar 74,3 dan mengalami peningkatan pada siklus II menjadi 80,4. Berdasarkan hasil yang dicapai, dapat disimpulkan bahwa upaya meningkatkan pembelajaran Biologi dengan penerapan Pendekatan *Scientific* dan Model *Problem Based Learning* (PBL) dapat meningkatkan hasil belajar Biologi kelas XI IPA 4 SMA Negeri 10 Kota Bogor.

Kata Kunci : Pendekatan *Scientific* dan Model *Problem Based Learning* (PBL) dan hasil belajar Kognitif, Afektif, Psikomotor