

## ABSTRAK

**Misahradarsi Dongoran.** Pengaruh Model Project Based Learning dan Discovery Learning Terhadap Hasil Belajar IPA Biologi, Keterampilan Proses Sains dan Sikap Ilmiah Siswa Kelas VIII SMP Negeri 1 Bangun purba.

Tujuan penelitian ini adalah untuk mengetahui pengaruh model project based learning dan discovery learning terhadap hasil belajar IPA biologi, keterampilan proses sains dan sikap ilmiah siswa kelas VIII SMP Negeri 1 Bangun purba pada materi pokok sistem pencernaan. Penelitian quasi eksperimen ini menggunakan pretes-postes control group design. Populasi penelitian ini adalah seluruh siswa kelas VIII SMP negeri 1 Bangun purba tahun pembelajaran 2015/2016 yang terdiri dari 8 kelas. Teknik pengambilan sampel adalah random sampling yaitu kelas eksperimen 1 menggunakan model pembelajaran project based learning, kelas eksperimen 2 menggunakan model pembelajaran discovery learning dan kelas eksperimen 3 menggunakan model pembelajaran konvensional. Total sampel adalah 99 orang siswa. Teknik pengumpulan data dengan menggunakan tes dan angket sikap ilmiah. Hasil belajar, keterampilan proses sains dan sikap ilmiah dianalisis dengan teknik analisis kovariat (Anacova) dan uji lanjut Tukey's dengan taraf signifikan  $\alpha = 0,05$ . Hasil Anacova menunjukkan bahwa terdapat pengaruh signifikan kelas yang dibelajarkan dengan model project based learning, discovery learning dan konvensional terhadap hasil belajar IPA biologi ( $F = 20,227$  ;  $P = 0,000$ ), terhadap keterampilan poses sains ( $F = 6,04$  ;  $P = 0,016$ ) dan terhadap sikap ilmiah ( $F = 27,280$  ;  $P = 0,000$ ). Nilai rata-rata postes hasil belajar IPA biologi, keterampilan proses sains dan sikap ilmiah siswa yang diajarkan dengan model pembelajaran project based learning lebih baik/tinggi dibandingkan dengan model pembelajaran discovery learning dan konvensional.

**Kata Kunci :** *project based learning, discovery learning, hasil belajar, keterampilan proses sains, sikap ilmiah siswa.*

## ABSTRACT

**MisahradarsiDongoran** :The Effect of Project Based Learning and Discovery Learning Towards Students Biology Learning Outcomes, Science Process Skills and Scientific Attitude for Grade VIII SMP Negeri 1 Bangunpurba.

This research is aimed to determinate the effect of Project Based Learning and Discovery Learning Towards Students Biology Learning Outcomes, Science Process Skills and Scientific Attitude for Grade VIII SMP Negeri 1 Bangun purba. A quasi eksperimental research uses pretest-posttest control group design. Sample were selected using random cluster sampling technique. experimental class 1 uses a project based learning learning models, experimental class 2 uses discovery learning learning models and experimental class 3 uses conventional learning models. Data collection techniques using test and scientific attitude questionnaires. Learning outcomes, science process skills and scientific attitudes were analyzed by covariate analysis (Anacova) and Tukey's advanced test with a significant level  $\alpha = 0,05$ . Anacova results show that there is a significant class effect by the project based learning models, discovery learning and conventional learning on natural biological science learning outcomes ( $F = 20,227$ ;  $P = 0,000$ ), science poses skills ( $F = 6.04$ ;  $P = 0.016$ ) and scientific attitudes ( $F = 27.280$ ;  $P = 0.000$ ). The average posttest value of biological science learning outcomes, science process skills and scientific attitudes of students with project based learning learning models is better / higher compared to discovery learning and conventional learning models.

**Keywords** : *project based learning, discovery learning, natural science of biology learning outcomes, science process skills, scientific attitudes.*