

ABSTRAK

Tujuan dari penelitian ini adalah untuk menganalisis pengaruh pembelajaran berbasis proyek (PjBL) dengan portofolio terhadap penguasaan konsep Angiospermae dan sikap siswa SMA terhadap sains. Penelitian ini dilakukan di salah satu SMA negeri di kota Bandung dengan sampel kelas X. Proyek utama dalam PjBL ini adalah membuat herbarium dan *booklet*. Portofolio yang digunakan berupa penilaian untuk perencanaan proyek siswa, gambar morfologi tumbuhan, laporan praktikum, bagan metagenesis Angiospermae, dan presentasi. Metode penelitian yang digunakan adalah *pre-experimental* dengan desain *pre-test and post-test design*. Penguasaan konsep Angiospermae siswa diukur dengan menggunakan soal *pre-test* dan *post-test* yang mengacu pada Taksonomi Bloom Revisi. Sikap siswa terhadap sains di ukur dengan menggunakan instrumen skala sikap Likert-4, indikator yang digunakan mengacu pada PISA 2006. Hasil penelitian menunjukkan capaian skor N-gain penguasaan konsep siswa sebesar 0,69 dan termasuk kategori sedang. Sikap siswa terhadap sains menunjukkan capaian skor N-gain sebesar 0,34 dan termasuk kategori sedang. Uji korelasi antara penguasaan konsep dan sikap siswa terhadap sains menunjukkan nilai $r=0,612$ dan termasuk kategori korelasi yang kuat. Respon siswa terhadap kegiatan PjBL dengan portofolio setelah diukur dengan menggunakan skala sikap respon siswa terhadap pembelajaran termasuk ke dalam kategori baik. Berdasarkan hasil penelitian, PjBL dengan portofolio telah mampu meningkatkan penguasaan konsep Angiospermae dan sikap siswa SMA terhadap sains.

Kata kunci: PjBL, portofolio, penguasaan konsep, sikap siswa terhadap sains, Angiopermae

ABSTRACT

The purpose of this study was to analyze the effect of project-based learning (PjBL) with the portfolio towards mastery of the concept of Angiospermae and attitudes of high school students towards science. This study was conducted in one of the state high school in the city with a population that is used is a class X. The sample used in this study is one class with 38 students as sample number. The method used is pre-experimental design with pre-test and post-test design. The concept of student mastery Angiospermae measured using about pre-test and post-test which refers to the Revised Bloom's Taxonomy. Students 'attitudes toward science was measured by using a Likert scale questionnaire-4, the indicators used refer to the PISA 2006 results showed the achievement scores of N-gain students' mastery of concepts of 0.69 and including medium category. For the students' attitudes toward science, the results showed the achievement scores of N-gain of 0.34 and including medium category. Furthermore, these two variables were tested correlations to see the relationship between students' mastery of concepts and attitudes towards science. Correlation test showed the value of $r = 0.612$ and a strong correlation category. The response of students to the activities of PjBL with the portfolio after measured using a questionnaire responses of students to learning with Likert scale-4, including into either category. Based on the research, PjBL with portfolio has effected the mastery of Angiospermae concept and attitude toward science in senior high school student.

Keywords: PjBL, portfolio, mastery of the concept, attitude toward science, Angiospermae