

ABSTRACT

Febri Silvia. 2018. *The Effect of Application of Project Based Learning Model on Improving Learning Outcomes of Drilling Practices of Mining Engineering Students of PDN AKNS.*

This research is motivated by the lack of drilling practice skills for most students of Mining Engineering Study Program Outside the Domicile of Sawahlunto Community Community Academy (PDD AKNS). The skills that have not been maximized are illustrated in the low results of student practice learning. This condition causes them to not be able to complete the drilling project independently, well, and correctly. One of the causes of the low learning outcomes is the conventional learning model that is applied. To the need in doing an improvement in the process of learning so that later applied model of Project Based Learning (PjBL). This study aimed to reveal the influence of the model Project Based Learning application to the improvement of learning outcomes drilling practice students of Engineering Mining PDD AKNS.

This type of research is the study is quasi experiment with design Pretest-Posttest Control Design. The research stage is the preparation, implementation, and the final stage. In the preparation stage the students' initial abilities were observed and made a rubric of performance appraisal. At the implementation stage the division of the experimental class and the control class are carried out in which the experimental class is applied to the PjBL model while the control class is still applied to the conventional model. In the final stage, data analysis, discussion and conclusion of research results are carried out.

Based on the analysis of data research, the results of testing the hypothesis that acquired that $t_{arithmetic}(2,479) > t_{table}(2,0101)$ at the level of significance (α) of 0,05. Student learning outcomes in the experimental class increased in the medium category while in the control class students experienced an increase in the low category. Can be concluded that the application of the model of Project Based Learning affect the improvement of learning outcomes drilling practice students of Engineering Mining PDD AKNS.

From the results of the study, it is expected that peer teaching staff who teach special skills courses in PDD AKNS can use PjBL as a consideration in the teaching and learning process so that student practice learning outcomes become better.

Keywords: *Student Drilling Practice Learning Outcomes , Project Based Learning Model*

ABSTRAK

Febri Silvia. 2018. Pengaruh Penerapan Model *Project Based Learning* terhadap Peningkatan Hasil Belajar Praktek Pemboran Mahasiswa Teknik Pertambangan PDD AKNS. Tesis Pascasarjana Fakultas Teknik Universitas Negeri Padang.

Penelitian ini dilatar belakangi masih kurangnya keterampilan praktek pemboran sebagian besar mahasiswa Teknik Pertambangan Program Studi di Luar Domisili Akademi Komunitas Negeri Sawahlunto (PDD AKNS). Keterampilan yang belum maksimal tersebut tergambar dalam rendahnya hasil belajar praktek mahasiswa. Kondisi ini menyebabkan mereka belum bisa menyelesaikan proyek pemboran secara mandiri, baik, dan benar. Salah satu penyebab rendahnya hasil belajar tersebut adalah model pembelajaran konvensional yang diterapkan. Untuk itu perlu dilakukan suatu pembenahan dalam proses pembelajaran sehingga kemudian diterapkan model *Project Based Learning* (PjBL). Penelitian ini bertujuan untuk mengungkap pengaruh penerapan model *Project Based Learning* terhadap peningkatan hasil belajar praktek pemboran mahasiswa Teknik Pertambangan PDD AKNS.

Jenis penelitian yang digunakan adalah penelitian adalah *quasi eksperimen* dengan desain *Pretest-Posttest Kontrol Design*. Adapun tahap penelitian adalah persiapan, pelaksanaan, dan tahap akhir. Pada tahap persiapan dilakukan observasi kemampuan awal mahasiswa dan membuat rubrik penilaian kinerja. Pada tahap pelaksanaan dilakukan pembagian kelas eksperimen dan kelas kontrol dimana pada kelas eksperimen diterapkan model PjBl sedangkan pada kelas kontrol tetap diterapkan model konvensional. Pada tahap akhir dilakukan analisis data, pembahasan dan pengambilan kesimpulan hasil penelitian.

Berdasarkan analisis data penelitian, dengan hasil uji hipotesis yang didapat bahwa $t_{hitung} (2,479) > t_{tabel} (2,0101)$ pada taraf signifikansi (α) 0,05. Hasil belajar mahasiswa pada kelas eksperimen mengalami kenaikan dengan kategori sedang sedangkan pada kelas kontrol mahasiswa mengalami kenaikan dengan kategori rendah. Dapat disimpulkan bahwa penerapan model *Project Based Learning* berpengaruh terhadap peningkatan hasil belajar praktek pemboran mahasiswa Teknik Pertambangan PDD AKNS.

Dari hasil penelitian, diharapkan kepada staf pengajar sejawat yang mengajar pada mata kuliah keterampilan khusus di PDD AKNS untuk dapat menggunakan PjBL sebagai pertimbangan dalam proses belajar mengajar sehingga hasil belajar praktek mahasiswa menjadi lebih baik.

Kata kunci: Hasil Belajar Praktek Pemboran mahasiswa, Model *Project Based Learning*