ABSTRAK

Awaluddin Rizky Panjaitan, NIM : 5131122002, Perbedaan Hasil Belajar Siswa yang Diajar dengan Menggunakan Pembelajaran *Problem Based Learning (PBL)* dan *Project Based Learning (PjBL)* pada Mata Pelajaran Gambar Teknik Kelas X SMK Swasta Mandiri Percut Sei Tuan T.P 2017/2018. Skripsi. Fakultas Teknik. Universitas Negeri Medan 2018.

Penelitian ini bertujuan untuk: (1) mengetahui hasil belajar siswa pada kompetensi Menyajikan gambar benda 2D secara gambar, sesuai aturan proyeksi orthogonal dengan menggunakan Model Pembelajaran *Project Based Learning* di kelas X TKR SMK Swasta Mandiri Percut Sei Tuan, (2) mengetahui hasil belajar siswa pada kompetensi gambar teknik dengan menggunakan *Problem Based Learning*. Populasi dalam penelitian ini adalah seluruh siswa kelas X TKR SMK Swasta Mandiri Percut Sei Tuan yang berjumlah 91 siswa. Pengambilan sampel digunakan teknik random sampling, sehingga jumlah sampel penelitian adalah 60 siswa. Metode pengumpulan data menggunakan tes hasil belajar Gambar Teknik. Uji persyaratan analisis dengan uji normalitas dan uji homogenitas. Uji hipotesis menggunakan uji -t. Hasil penelitian menunjukkan bahwa hasil belajar pada kompetensi menyajikan gambar benda 2D secara gambar sketsa (gambaran garis besarnya saja dari suatu gambar atau lukisan yang belum selesai), sesuai aturan proyeksi orthogonal kelas eksperimen (menggunakan Model Pembelajaran *project based learning*) diperoleh nilai rata-rata sebesar 77,2 dan standar deviasi 6,488 dengan tingkat kecenderungan nilai tinggi sebesar 70%. Sedangkan kelas kontrol (menggunakan model pembelajaran *prblem based learning*) diperoleh nilai rata-rata 72,93 dan standar deviasi 6,617 dengan tingkat kecenderungan nilai cukup sebesar 56,67 %. Hasil uji-t diperoleh nilai $t_{htung} > t_{table}$, maka dengan ini Ho ditolak. Hal ini menunjukkan bahwa penerapan model pembelajaran *project based learning* memberikan pengaruh yang signifikan terhadap hasil belajar Gambar Teknik.

Kata kunci: Model Pembelajaran, *Project Based Learning*, *Prblem Based Learning*, Hasil Belajar

ABSTRACT

Awaluddin Rizky Panjaitan, NIM: 5131122002, Differences in Learning Outcomes of Students Who are Teached Using Problem Based Learning (PBL) and Project Based Learning (PjBL) Learning on Technical Drawing Subjects Class X Mandiri Private Vocational School Percut Sei Tuan T.P 2017/2018. Essay. Faculty of Engineering. Medan State University 2018.

This study aims to: (1) find out the learning outcomes of students on competence Presenting images of 2D objects in pictures, according to orthogonal projection rules by using Project Based Learning Learning Model in class X TKR Mandiri Private Vocational School Percut Sei Tuan, (2) knowing student learning outcomes on technical drawing competencies using Problem Based Learning. The population in this study were all students of class X TKR of Mandiri Private Vocational School Percut Sei Tuan, amounting to 91 students. Sampling was used random sampling technique, so the number of research samples was 60 students. Data collection method uses test results of learning techniques. Test requirements analysis with normality test and homogeneity test. Hypothesis testing using the -t test. The results showed that the learning outcomes of the competency presents 2D images in sketch drawings (the outline only of an unfinished picture or painting), according to the rules of the orthogonal projection of the experimental class (using the project based learning model) obtained an average value of 77.2 and a standard deviation of 6.488 with a trend of high value of 70%. While the control class (using learning models based on learning) obtained an average value of 72.93 and a standard deviation of 6.617 with a tendency level of sufficient value of 56.67%. The t-test results obtained by the value of $t_{count} > t_{table}$, so with this Ho is rejected. This shows that the application of the project based learning model gives a significant influence on the learning outcomes of Drawing Technique.

Keywords: Learning Model, Project Based Learning, Pre-Based Learning, Learning Outcomes.