

## ABSTRAK

**ANRIANO LUMBANRAJA, NIM 5113111004. Pengaruh Penggunaan Model Pembelajaran *Project Based Learning* Terhadap Hasil Belajar Menggambar Konstruksi Tangga Siswa Kelas XI Kompetensi Keahlian Teknik Gambar Bangunan SMKN 1 Balige. Skripsi, Fakultas Teknik Universitas Negeri Medan.**

Penelitian ini bertujuan untuk mengetahui 1). Hasil belajar Menggambar Konstruksi Tangga yang diajarkan dengan Model Pembelajaran *Project Based Learning* berbeda dengan yang diajarkan dengan pembelajaran konvensional. 2). Hasil belajar menggambar konstruksi tangga yang diajarkan dengan model pembelajaran *Project Based Learning* lebih tinggi dibandingkan dengan yang diajarkan dengan pembelajaran konvensional. Sampel penelitian adalah siswa TGB-1 sebagai kelas Eksperimen sebanyak 21 orang dan kelas TGB-2 sebagai kelas kontrol sebanyak 19 orang, sampel diambil secara random assignment yakni berdasarkan undian.

Sebelum penelitian ini dilaksanakan, instrument penelitian tes hasil belajar menggambar konstruksi tangga beton bertulang dengan perangkat AutoCAD terlebih dahulu diujicobakan. Hasil Ujicoba butir tes Instrument tes hasil belajar menggambar konstruksi Tangga beton bertulang dengan perangkat AutoCAD yang valid 17 butir dari 30 butir tes yang diuji cobakan, dan ditambah 3 butir soal yang diperbaiki dengan koefisien reabilitasnya sebesar 0,9560.

Dari hasil penelitian diperoleh hasil  $F_{Hitung} = 13,297 > F_{Tabel} = 4,18$ , disimpulkan bahwa hasil belajar menggambar konstruksi tangga yang menggunakan model pembelajaran *Project Based Learning* dan pembelajaran konvensional menunjukkan perbedaan. Sedangkan perhitungan uji t diperoleh bahwa  $t_{hitung} = 3,646 > t_{tabel} = 1,686$ . Sehingga dapat bahwa terdapat perbedaan hasil belajar, dengan kata lain, pembelajaran *Project Based Learning* memberikan pengaruh yang lebih baik terhadap hasil belajar menggambar konstruksi Tangga beton bertulang dengan perangkat AutoCAD siswa kelas XI kompetensi keahlian teknik gambar bangunan SMKN 1 Balige tahun ajaran 2015/2016.

Kata kunci : *Project Based learning*, Hasil Belajar

## ABSTRACT

ANRIANO LUMBANRAJA, NIM type 511311004. *The Effect Of Learning Model Project Based Learning Of Outcomes Drawing Construction Strains In Class XI Student of Skill Architecture Engineering Competition SMKN 1 Balige*. Thesis, Faculty of Engineering, University of Medan.

This research aims to determine 1). Construction Drawing Stairs learning outcomes are taught Learning Project Based Learning model is different from that taught by conventional learning. 2) The results of learning to draw construction ladder taught learning model Project Based Learning is higher compared to those taught by conventional learning. Samples were students TGB-1 as a class experiment as much as 21 and TGB-grade 2 as the control class as many as 19 people, samples taken at random assignment that is based on a lottery.

Before the research was conducted, the research instrument test results to learn to draw construction of reinforced concrete stairs with AutoCAD devices tested beforehand. Results Test Instrument test items achievement test staircase reinforced concrete construction drawing with AutoCAD valid device 17 grains of 30 test items were tested, and added 3 items are fixed with reliability coefficient of 0.9560.

From the research results of  $F = 13.297 > F \text{ table} = 4.18$ , it was concluded that the study results are used to draw construction ladder Project Based Learning model of learning and conventional learning shows the difference. While the calculation t test showed that  $t = 3.646 > t \text{ table} = 1.686$ . So it can be that there are differences in learning outcomes, in other words, learning Project Based Learning gives a better effect on learning outcomes reinforced concrete staircase construction drawing with AutoCAD device class XI student of Architecture Engineering Expertise Competition SMK 1 Balige the academic year 2015/2016.

Keyword: Project Based learning, Learning Outcomes