ABSTRAK

Mas'ud Wanto (NIM 508421003). Hubungan Antara Kemampuan Membaca Gambar Teknik dan Pengetahuan Dasar Mesin Terhadap Hasil Praktik Perbaikan Motor Otomotif Siswa Tingkat I SMK PAB 12 Saentis Deli Serdang Tahun Ajaran 2011/2012. Skripsi-Fakultas Teknik. Jurusan Pendidikan Teknik Mesin-Universitas Negeri Medan

Penelitian ini bertujuan untuk mengetahui hubungan antara kemampuan membaca gambar teknik dan pengetahuan dasar mesin terhadap hasil praktik perbaikan motor otomotif. Populasi penelitian ini adalah 80 orang. Sampel penelitian sebanyak 40 orang ditentukan dengan teknik *purposive sampling* dimana peneliti mengambil satu kelas dijadikan objek penelitian. Data penelitian ini dikumpulkan dengan menggunakan tes dan dokumentasi.

Dari hasil analisis data diperoleh tingkat kecenderungan Kemampuan Membaca Gambar Teknik, Pengetahuan Dasar Mesin dan Hasil Belajar Praktik Motor Otomotif berkategori cukup. Uji pensyaratan analisis yang dipergunakan adalah uji normalitas dan uji linieritas. Hasil Uji normalitas menunjukkan sebaran data variable penelitian berdistribusi normal, hasil uji normalitas diperoleh data penelitian mempunyai hubungan linier.

Hasil uji hipotesis menunjukkan bahwa terdapat hubungan yang signifikan dan positif antara variable Kemampuan Membaca Gambar Teknik dan Hasil Belajar Praktik Motor Otomotif yaitu sebesar 0,738, dimana harga r_{tabel} pada taraf signifikan 5% sebesar 0,361 hasil uji hipotesis menunjukkan bahwa terdapat hubungan yang signifikan dan positif antara variable Pengetahuan Dasar Mesin dengan Hasil Belajar Praktik Motor Otomotif yaitu sebesar 0,747.

Hasil analisis regresi ganda menunjukkan terdapat hubungan linier yang berarti antara Kemampuan Membaca Gambar Teknik dan Pengetahuan Dasar Mesin secara bersama-sama dengan Hasil Belajar Praktik Motor Otomotif dengan koefisien korelasi R sebesar 0,785 sementara diperoleh koefisien determinasi R^2 sebesar 0,616 yang berarti bahwa 61,6% Hasil Belajar Praktik Motor Otomotif dijelaskan dengan Kemampuan Membaca Gambar Teknik dan Pengetahuan Dasar Mesin. Besar sumbangan efektif variable Kemampuan Membaca Gambar Teknik terhadap Hasil Belajar Praktik Motor Otomotif adalah sebesar 37% dan sumbangan efektif variable Pengetahuan Dasar Mesin terhadap Hasil Belajar Praktik Motor Otomotif sebesar 41,5%

Kata Kunci : Gambar teknik, dasar mesin dan hasil belajar praktik

ABSTRACT

Mas'ud Wanto (NIM 508 421 003). Relationship Between Reading Ability Engineering Drawing and Knowledge The Machine Basic Against Learning Outcomes Automotive Motor Repair Practices Student Level I vocational PAB 12 Saentis Deli Serdang in Academic Year 2011/2012. Thesis-Faculty of Engineering. Education Department of Mechanical Engineering-University of Medan

This study aimed to determine the relationship between the ability to read engineering drawings and basic knowledge of machinery to the results of the automotive motor repair practices. This study population is 80 people. Study sample as many as 40 people are determined by purposive sampling technique in which researchers took one class were subjected to experiments. The data were collected using a test and documentation.

From the analysis of the data obtained the Technical trend Reading Ability, Knowledge Base and Machine against Learning Outcomes Automotive Practice category enough. Upon reservation of analysis used test is the test of normality and linearity test. Normality test results showed the distribution of the study variable data were normally distributed, the normality test results obtained by the research data have a linear relationship.

Hypothesis test results indicate that there are significant and positive relationship between the variable Reading Literacy and Learning Outcomes Technical Automotive Practice that is equal to 0.738, where prices rtabel at 5% significance level of 0.361 the hypothesis test results show that there is a significant and positive relationship between the variable Knowledge Base Machines with Motor Automotive Practice Learning Outcomes in the amount of 0.747.

The results of multiple regression analysis showed a significant linear relationship exists between Reading Ability and Knowledge Base Technical Engineering jointly with Motor Automotive Practice Learning Outcomes with a correlation coefficient R of 0.785 while the coefficient of determination R2 obtained at 0.616 which means that 61.6% Results Learning Automotive Practice Motorcycle explained Reading Literacy Basic Drawing Techniques and Knowledge Engineering. Large variable effective contribution towards Reading Literacy Learning Outcomes Technical Automotive Practice Motorcycle amounted to 37% and the effective contribution of the variable Knowledge Base Engine and Motor Automotive Practice Learning Outcomes of 41.5%

Keywords: Drawing techniques, basic engineering practices and learning outcomes