

ABSTRAK

Ruslan Agustian, NIM: 5142111008. *Hubungan Antara Kemampuan Pemahaman Matematika Dan Disiplin Belajar Dengan Hasil Belajar Mekanika Teknik Siswa Kelas X DPIB (Desain Permodelan Dan Informasi Bangunan) SMK Negeri 1 Lubuk Pakam. Skripsi. Fakultas Teknik Universitas Negeri Medan 2020.*

Penelitian ini bertujuan untuk mengetahui: 1) Hubungan yang signifikan Kemampuan Pemahaman Matematika dengan hasil belajar Mekanika Teknik pada siswa kelas X DPIB Semester I SMK Negeri 1 Lubuk Pakam, 2) Hubungan yang signifikan Disiplin Belajar dengan hasil belajar Mekanika Teknik pada siswa kelas X DPIB Semester I SMK Negeri 1 Lubuk Pakam, 3) Hubungan yang signifikan antara Kemampuan Pemahaman Matematika dan disiplin belajar secara bersama-sama dengan hasil belajar Mekanika Teknik pada siswa kelas X DPIB Semester I SMK Negeri 1 Lubuk Pakam.

Berdasarkan pengujian hipotesis dapat disimpulkan: 1) terdapat Hubungan Kemampuan Pemahaman Matematika dengan Hasil Belajar Mekanika Teknik dengan besar korelasi $rx_1y = 0,748$ dan $t_{hitung} = 6,152$ dan dari korelasi parsial diperoleh $rx_1y.x_2 = 0,740$ dan $t_{hitung} = 5,903$. 2) terdapat hubungan Disiplin Belajar dengan hasil belajar Mekanika Teknik dengan besar korelasi $rx_2y = 0,678$ dan $t_{hitung} = 5,033$ dan dari korelasi parsial diperoleh $rx_2y.x_1 = 0,667$ dan $t_{hitung} = 4,803$. 3) terdapat hubungan antara Kemampuan Pemahaman Matematika dan disiplin belajar secara bersama-sama dengan hasil belajar Mekanika Teknik dengan besar korelasi ganda diperoleh $R_{xy(1.2)} = 0,869$ dan uji keberartian korelasi dengan menggunakan Uji-F di peroleh $F_{hitung} = 44,383$. Dengan demikian Kemampuan Pemahaman Matematika dan Disiplin Belajar mempunyai hubungan yang positif dan berarti terhadap Hasil Belajar Mekanika Teknik.

Besar sumbangan efektif dari Kemampuan Pemahaman Matematika terhadap Hasil Belajar Mekanika Teknik adalah sebesar 43,391% dan sumbangan efektif dari Disiplin Belajar terhadap Hasil Belajar Mekanika Teknik adalah sebesar 31,983%, dengan berarti sumbangan Kemampuan Pemahaman Matematika dan Disiplin Belajar terhadap Hasil Belajar Mekanika Teknik adalah sebesar 75,375%.

Kata Kunci : *Kemampuan Pemahaman Matematika, Disiplin Belajar, Hasil Belajar Mekanika Teknik*

ABSTRACT

Ruslan Agustian, NIM: 5142111008. *Relationship Between the Ability of Understanding Mathematics and Learning Discipline With the Learning Results of Mechanical Engineering Students in Class X DPIB (Design Modeling and Building Information) SMK Negeri 1 Lubuk Pakam. Thesis. Faculty of Engineering Medan State University 2020.*

This study aims to find out: 1) Significant relationship between Mathematics Comprehension Ability and Mechanical Mechanics learning outcomes in Grade X DPIB students of Semester I SMK Negeri 1 Lubuk Pakam, 2) Significant Relationship of Learning Discipline with Mechanical Mechanics learning outcomes in Grade X DPIB Semester students I State Vocational School 1 Lubuk Pakam, 3) Significant relationship between Mathematics Understanding Ability and the discipline of learning together with the learning outcomes of Mechanical Mechanics in class X DPIB students of First Semester I State Vocational School 1 Lubuk Pakam.

Based on testing the hypothesis it can be concluded: 1) There is a Relationship between Mathematical Understanding Ability and Mechanical Engineering Learning Outcomes with the correlation value $rx_1y = 0.748$ and $t_{count} = 6.152$ and from the partial correlation obtained $rx_1y.x_2 = 0.740$ and $t_{count} = 5.903$. 2) there is a relationship of Learning Discipline with Mechanical Engineering learning outcomes with a large correlation $rx_2y = 0.678$ and $t_{count} = 5.033$ and from the partial correlation obtained $rx_2y.x_1 = 0.667$ and $t_{count} = 4.803$. 3) there is a relationship between Mathematics Comprehension Ability and discipline of learning together with Mechanical Engineering learning outcomes with a large correlation obtained by $R_{xy(1,2)} = 0.869$ and the test of the significance of correlation by using the F-Test obtained $F_{count} = 44.338$. Thus the Ability of Understanding Mathematics and Learning Discipline has a positive and meaningful relationship to the Learning Results of Mechanical Mechanics.

The effective contribution of Mathematics Understanding Ability to Learning Results of Mechanical Mechanics is 43.391% and effective contribution of Learning Discipline to Learning Results of Mechanical Mechanics is 31.983%, meaning that the contribution of Mathematics Understanding Ability and Learning Discipline to Learning Outcomes of Mechanical Mechanics is 75.375% .

Keywords: *Mathematics Understanding Ability, Learning Discipline, Learning Results in Mechanical Mechanics*