

ABSTRAK

Safrinanda Harahap. NIM 5111511012. Penerapan Model Pembelajaran Kooperatif Tipe *Team Accelerated Instruction* (TAI) Untuk Meningkatkan Aktivitas dan Hasil Belajar Mekanika Teknik Pada Siswa Kelas X Program Keahlian Teknik Gambar Bangunan SMK Negeri 1 Percut Sei Tuan . Skripsi. Fakultas Teknik – Universitas Negeri Medan. 2015.

Penelitian ini merupakan Penelitian Tindakan Kelas (PTK) bertujuan untuk menerapkan model pembelajaran yang dapat meningkatkan aktivitas dan hasil belajar mata pelajaran Mekanika Teknik pada kompetensi Dasar Menghitung Tegangan Pada Struktur di Kelas X Program Keahlian Teknik Gambar Bangunan SMK Negeri 1 Percut Sei Tuan T.P. 2014/2015 yang berjumlah 25 siswa. Prosedur tindakan dikemas ke dalam dua siklus yang masing-masing siklus terdiri dari dua kali pertemuan. Setiap siklus terdiri dari tahapan perencanaan (*planning*), tindakan (*acting*), pengamatan (*observing*) dan refleksi (*reflecting*). Pada siklus I mempelajari tentang Lenturan pada balok, Diagram Tegangan, Titik Berat dan Tegangan Lentur pada Balok. Pada siklus II mempelajari tentang Distribusi Tegangan Geser, Momen Inersia, dan Tegangan Geser pada Balok.

Data penelitian diambil dari tes hasil belajar siswa, lembar observasi dan lembar kerja siswa (LKS). Hasil uji coba instrumen penelitian dari 20 soal pada siklus I terdapat 16 soal valid, uji tingkat kesukaran terdapat 5 soal mudah, 11 soal sedang dan 4 soal sukar, uji daya pembeda tes didapat 4 soal buruk, 6 soal cukup dan 10 soal baik, uji reliabilitas tes didapat 0,79 (Tinggi). Pada siklus II dari 20 soal diperoleh 16 soal valid, uji tingkat kesukaran terdapat 6 soal mudah, 9 soal sedang dan 5 soal sukar, uji daya pembeda tes didapat 5 soal buruk, 4 soal cukup dan 11 soal baik, uji reliabilitas tes didapat 0,81 (sangat tinggi). Penelitian dikatakan berhasil diukur berdasarkan rata-rata kumulatif aktivitas dan hasil belajar siswa memperoleh nilai minimal 75 dan tuntas secara klasikal jika seluruh kelas 75% siswanya tuntas.

Hasil penelitian menunjukkan aktivitas belajar siswa pada siklus I dengan hasil nilai rata-rata 77 dan prosentase kelulusan yaitu 72% meningkat pada siklus II menjadi 89,60 dan Prosentase kelulusan yaitu 92%. Hasil belajar siswa terjadi peningkatan, pada siklus I dengan hasil nilai rata-rata sebesar 72,75 dan prosentase kelulusan yaitu 72% meningkat pada siklus II menjadi 85,25 dan Prosentase kelulusan yaitu 92%. Berdasarkan hasil penelitian dapat disimpulkan bahwa dengan penerapan Model Pembelajaran Kooperatif Tipe *Team Accelerated Instruction* (TAI) dapat meningkatkan aktivitas dan hasil belajar siswa pada Mata Pelajaran Mekanika Teknik Kompetensi Dasar Menghitung Tegangan Pada Struktur Siswa Kelas X Program Keahlian Teknik Gambar Bangunan SMK Negeri 1 Percut Sei Tuan T.P. 2014/2015. Selain itu dapat menimbulkan suasana belajar yang menyenangkan karena siswa aktif dan belajar untuk menemukan sendiri makna dari pembelajarannya.

Kata Kunci : *Model Pembelajaran Kooperatif Team Accelerated Instruction (TAI), Aktivitas Siswa dan Hasil Belajar*

ABSTRACT

Safrinanda Harahap. Registration number 5111511012. Application of cooperative Learning Model Team Accelerated Instruction (TAI) to Increase Activity and Learning Outcomes At The Engineering Mechanics of Student Class X State Vocational High School 1 Percut Sei Tuan Program The Architecture Engineering Expertise. Skripsi. Faculty of Technique - State University of Medan 2015.

This research represent the Research of Class Action aim to apply the study model which can improve the activity and the result of Engineering Mechanics of Student Class X Program The Architecture Engineering Expertise of State Vocational High School 1 Percut Sei Tuan in the teaching year 2014/2015 amounting to 25 students. Action procedure is created into two cycles which is each cycle consisted of twice meeting. Each cycle consisted by the planning step planning, acting, observing and reflecting. At cycle I learning about bending the beams, Diagram Voltage, Point Weight And Stress Bending on Beams, at cycle II learning about Slide Voltage Distribution, moment of inertia, And Voltage Slide on The Beam.

File research taken away from the test of result learning student, sheet of observation and spread sheet student. Result of test-drive from research instrument 20 questions. At cycle I there are 16 valid question, test the difficulty level there are 5 easy question, 11 medium question and 4 difficult question, the distinguishing energy test got 4 ugly question, 6 question enough and 10 good question, the reliability test got 0,79 (high). At cycle II from 20 questions obtained 16 valid question, the test difficulty level there are 6 easy question, 9 medium question and 5 difficult question, the distinguishing energy test got 5 ugly question, 4 enough question and 11 good problem, the reliability test got 0,81 (very high). Research told to succeed measured by pursuant to mean of cumulative activity and the result of learning student get the minimum value 75 and complete by classical if all class 75% the students are complete.

Result of research show the activity learning of student at cycle I with the Mean result 77 and percentage of graduation is 72% rising at cycle II become 89,60 and percentage of graduation is 92% . Result learning of student happened the improvement, at cycle I with the result flatten to flatten equal to 72,75 and percentage of graduation is 72% mounting at cycle II become 85,25 and percentage of graduation is 92%. Pursuant to inferential research the result that with the application of cooperative Learning Model Team Accelerated Instruction (TAI) can improve the activity and result of learning student at Engineering Mechanics of Student Class X Program The Architecture Engineering Expertise State Vocational High School 1 Percut Sei Tuan in the teaching year 2014/2015. The others, can cause learning fun for the student active and Learn to find their own meaning of the learning.

Keyword: *Cooperative Learning Model Team Accelerated Instruction (TAI), Student Activity and Result of Learning.*