

ABSTRAK

Penerapan *Preventive Maintenance* berbasis mahasiswa pada proses pembelajaran praktik pemesinan FT - UNY

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Tujuan penelitian ini adalah, untuk mengetahui kemanfaatan budaya *preventive maintenance* dan pola pendampingannya pada PBM praktik, serta kelaikan dan kelayakan mesin perkakas di bengkel pemesinan Program studi teknik mesin FT UNY.

Jenis penelitian yang dipakai adalah penelitian tindakan kelas (*classroom action research*) jenis partisipan langsung (*participatory action research*) Sebagai subyek dalam penelitian ini adalah mahasiswa Program studi teknik mesin FT-UNY dan sebagai sampelnya adalah mahasiswa semester 3 yang berjumlah 36 orang mahasiswa. Obyek penelitian tentang penerapan *preventive maintenance* pada pembelajaran praktik pemesinan. Lokasi penelitian dilaksanakan di bengkel kerja praktik Program studi teknik mesin FT- UNY . Waktu penelitian selama 5 bulan mulai Juli sampai dengan November 2014.

Pola pelaksanaan *preventive maintenance* yang dilaksanakan di bengkel praktik jurusan mesin FT UNY dilakukan dengan menerapkan prinsip-prinsip pembimbingan, pendampingan dan pengawasan secara intensif oleh dosen. Budaya *preventive maintenance* pada prestasi praktik mahasiswa memberikan dampak yang baik, ditandai dengan kecepatan menyelesaikan *job sheet* yang bisa dicapai 2 kali lipat dari kelompok control. Kelompok perlakuan 72 job (variasi 8 job) dengan indek capaian 4, kelompok control 30 job (variasi 7 job) dengan indek capaian 2,14. Budaya *preventive maintenance* yang dilakukan di bengkel praktik jurusan mesin FT UNY membawa dampak positif terhadap kelayakan dan kelaikan mesin perkakas yang digunakan praktik mahasiswa.

Kata kunci: *preventive maintenance*, pembelajaran praktik pemesinan

ABSTRACT

The Application of Preventive Maintenance student based on the learning process of machining practices FT – UNY

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The purpose of this study is, to know the benefits of preventive maintenance culture and patterns of facilitation in the PBM practices, as well as the feasibility and feasibility of machine tools in machining workshop program FT UNY study mechanical engineering.

This type of research used is action research (classroom action research) type of direct participants (participatory action research) As the subjects in this study were students of mechanical engineering studies FT-UNY and as the sample is 3 semester students totaling 36 students. Object of research on the application of preventive maintenance on learning machining practices. Locations of research carried out at the workshop practice of mechanical engineering study programs FT UNY. When the study for 5 months from July to November 2014.

The pattern of implementation of preventive maintenance carried out in the workshop practices FT UNY engine department is done by applying the principles of coaching, mentoring and intensive supervision by the lecturer. Cultural practices preventive maintenance on student achievement gives a good effect, characterized by the speed of completing the job sheet that can be achieved 2-fold of the control group. Treatment group 72 jobs (8 variations job) with a performance index 4, the control group of 30 jobs (7 variations job) with a performance index of 2.14. Culture preventive maintenance done in the workshop practices engine department FT UNY positive impact on the feasibility and feasibility of machine tools used student practice.

Keywords: *preventive maintenance, machining practice learning*