

IMPLEMENTASI METODE PEMBELAJARAN PROBLEM BASED LEARNING PADA MATA KULIAH PEMESINAN GERINDA

by Thomas Sukardi, Achmad Arifin, Surono, Endri Triwiyono

ABSTRACT

The purposes of this research are (1) to know the implementation of problem based learning method in learning practice of grinding machining, and (2) to measure the improvement of student analysis ability to work completion in grinding machining course by applying problem based learning method. This research uses quantitative approach with quasy experiment design, using Posttest-Only Control Design. This population are undergraduate students of Mechanical Engineering Education Program of FT UNY option fitting which are taking the course of grinding machining, and as research sample are T1 class with student number 20 people. Data collection methods were conducted in several ways questionnaire method, observation, documentation, assessment of practice report and presentation. Data analysis technique was done by using quantitative descriptive technique. The results showed that: 1) problem-based learning method can be implemented well on the practice of grinding machining course, especially on jobs: (a) surface grinding, (b) cutting tools grinding, (c) cylindrical grinding. Students look more enthusiastic and directed in carrying out the practice because it understands the issues to be solved, 2) the implementation of problem-based learning method can improve students' analysis ability on job completion in grinding course. Representation of analytical ability are seen from the average of presentation score of 82,00 and average of final practice report score equal to 84,625. In addition, the perception index of student perceptions related to analytical ability also showed an increase from 2.47 (less good) to 3.337 (very good).

Kata Kunci: surface grinding, cutting tools grinding, cylindrical grinding, analytical ability