

THE EFFECTIVENESS OF THE BLOCK SYSTEM IN MECHANICAL PRACTICE LEARNING IN DIPLOMA IV UNY

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ABSTRACT

This study aims to measure the effectiveness of learning that is carried out with the block system in forming the competence of Mechanical Engineering Diploma 4 students to replace learning with the regular system which has been carried out so far and has proven effective in the sense that it has graduated many students.

This study used a descriptive quantitative approach with a quasi-experimental method. The quasi-experimental design used in this research was One-Group Pretest-Posttest Design, with block system treatment in the experimental group.

The results concluded that: (1) for the Straight Shaft workpiece the experimental group obtained a mean value of 80.83 (A-), while for the control group the mean value was 77.65 (B+). So, there are differences in scores between the two groups; (2) for the multilevel shaft workpiece the experimental group obtained a mean value of 78.96 (B+), while for the control group the average value (mean) obtained was 76.74 (B+). So, there is no significant difference in scores between the two groups; (3) for Bolt workpieces, the experimental group obtained a mean value of 79.47 (B+), while for the control group the average value (mean) was 82.09 (A-). So there is a difference in value between the two groups; (4) for the Eccentric Shaft workpiece the experimental group obtained a mean value of 74.23 (B), while for the control group a mean value of 75.12 (B) was obtained. So, there is no difference in scores between the two groups; (5) The quality of the practical results of students from the D4 Mechanical Engineering Study Program who apply block system learning is NOT DIFFERENT from students from the Bachelor of Mechanical Engineering Education Study Program who apply regular system learning in Basic Machining courses; and (6) The posttest results for the experimental group obtained a mean value of 43.23 (D value), while for the control group the mean value was 59.58 (C value). Thus the post-test results obtained by D4 Mechanical Engineering study program students are LOWER than Mechanical Engineering Education study program students.

Kata Kunci: *Block system, machining practice, diploma, vocation*