

**EFFORTS TO IMPROVE PERFORMANCE STUDY
ENGINE REPAIR FOLLOWING THEORY COMPONENTS
COOPERATIVE LEARNING THROUGH TYPE CONCEPT MAPPING
IN CLASS XI B STUDENT PROGRAM TECHNICAL SKILLS
MOTORCYCLE IN SMK DIPONEGORO DEPOK**

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ABSTRACT

Research aims to determine the increase in learning achievement following the theory of improved engine components through a model of cooperative learning the type of concept mapping at student in the class XI B program motorcycle engineering at SMK Diponegoro.

The study was conducted at SMK Diponegoro Depok, Sleman, the research subjects were the students class XI B, amounting to 17 students. This study is a type of Classroom Action Research (CAR), through a type of cooperative learning model approach a concept mapping. Model / applied research design refers to the model of Kurt Lewin conducted in four phases, namely planning, action, observation and reflection. Classroom action research conducted in three cycles. Implementation cycle starts from the planning stages of research based on a preliminary study. The implementation phase of a class action by the application of cooperative learning concept map types, including: the presentation of the material, the formation of groups, group discussions, class presentations and evaluation to determine students' achievement. Observation stage is to fill the observation sheet keterlaksanaan type of cooperative learning process by the observer concept map. Reflection phase is to evaluate the achievements and shortcomings of each cycle for improvement in the next cycle.

Results showed that student achievement increased at each cycle after the model of cooperative learning approaches applied to the type of concept map. This is indicated by the magnitude of the average percentage of the value end of the cycle and the achievement of student learning thoroughness which refers to the KKM. At cycle 1 average - average student achievement reached 75.87 to the percentage of the number of students who reach the exhaustiveness learn as much as 64.70% or 11 students. In the second cycle average - average student achievement increased to 77.42 with the percentage of students who achieve exhaustiveness study increased 11.70% to 76.40%, an increase of 2 students to 13 students. In the third cycle average - average learning achievement to be 75.35 with the percentage of students who achieve exhaustiveness study increased 5.90% to 82.30%, an increase of 1 student to 14 students.

Key words: Cooperative learning concept mapping type, motivation, learning achievement