## THE EFFECT OF USING METAL CASTING TECHNICAL MODULE TO STUDENTS' ACHIEVEMENT OF CLASS X IN METAL CASTING ENGINEERING DEPARTMENT SMK N 2 KLATEN

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## Abstract

The purpose of the research is to determine the students' achievement untreated model of learning by using learning module, to determine students' achievement treated with learning module and to know the difference of students' achievement between the treated model of learning by using learning module and students' achievement with untreated model of learning module.

This research can be catagorized as Quasi Experimental study with using Nonequivalent Control Group Design. The population in this study was the entire class of X SMK N 2 Klaten. The sample was selected by purposive sampling i.e. 32 students of X PL-A class as control class and X PL-B class as experiment class. Data collection technique was using the test technique. Before the students were given the treatment, they were given pretest. Furthermore the students were treated. Control class was treated the learning model without using learning module while experimental class was treated with learning model by using learning module. The students were given a posttest after given treatment. The hypothesis testing method was t-test analysis.

The results showed that the use of learning module had a positive impact on student achievement. It was demonstrated by obtaining the average value of posttest in experimental class was higher than the average value of posttest in control class. Experimental class obtained average posttest value of 75.41 while the control class was 70.38 of average posttest value. From the analysis of t-test the thit value = 5.716 and  $t_{15\%(1,62)} = 2.000$ . The thit value was more than  $t_{15\%(1,62)}$  which means *H*o is rejected and  $H\alpha$ , is accepted so there is a difference in students' achievement between students who were treated learning model without using learning module and learning model by using the learning module.

Keywords: The Effect, Metal Casting Technical Module, Students' Achievement