ABSTRACT

THE EFFECT OF *JIGSAW* METHOD OF LEARNING ACHIEVEMENT IN BASIC WELDING WITH BASIC COMPETENCY SELECTION, WELDING MACHINE SETTING AND ELECTRODE IN SMK N 2 KLATEN

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The purpose of research are: (1) to determine the effect of the jigsaw method of active learning and learning achievement in basic welding class selection of basic competence, setting and electrode welding machine using the jigsaw method of cooperative models in SMK Negeri 2 Klaten, (2) to know the students' learning activeness basic welding using a jigsaw model of cooperative learning method possible, and (3) to know the differences in learning outcomes and the control group with experimental group jigsaw learning model on the basis of the welding subjects.

The quasi experimental method is used in this research. The research was conducted at SMK Negeri 2 Klaten, Class 2 Mechanical Engineering (2MA) as the experimental group and 2 Mechanical Engineering Class 2 (2MB) as a control group and 2MA class as the experimental group using the jigsaw model of cooperative learning in learning activities. The jigsaw method in class experiments were divided into origin groups and expert groups, then 2MB class as the control group used the teaching methods of lectures. Multiple choice sheet and observation sheet was the instrument of this research. Analysis of the data used is the calculation of the mean, mode, median and t test comparison.

The results of this research were: (1) activity of experiment class is 90% of students are very active in learning activities. (2) the average value of experimental class is 87, 7, Highest value is 88. The mean of these data is 88. The highest value was 98; the lowest value is 78; and, (3) the difference of achievement of learning was calculated by T Test comparation. The result of T Test comparation is $T_{count} < T_{Table} = 0.15616 < 1.990$, so the calculations stated that there was no significant difference between the results of an experimental group reseach using a jigsaw model and a control group using lecture.

Keywords: *JIGSAW*, Achievement, Basic Welding