
#### Abstract

ABSTRAK The tittle of this research is the affection of assembling cooperative larning tipe jigsaw to student's studied output in SMK Pasundan Bandung. The problem of this research is teacher still use convensional method than students are passive. in study activity.Aiming this research are: (1) to find out diffrently student's studied output in vocational subject and entrepreneur learning before and after assembled cooperative learning tipe jigsaw in XI II SMK Pasundan 4 Bandung, 2 to find out how much increase student student's studied output in vocational subject and entrepreneur learning after assembled cooperative learning tipe jigsaw in XI II SMK Pasundan 4 Bandung. This research Using experiment quasy method. The popuations is class XI MP SMKN 4 Bandung periode 2015-2016. With two samples are 37 students in class XII MP I as control class and 37 students in class XI MP II as experiment class. Research Instrument is test type multiple choice with 20 questions. Data analysis use test-t by SPSS 21.0 for Windows program with Paired Sample t-Tes. Based on data analisys research output, in post test has signifikansi value (2-tailed) is 0,000, the signficant is $<0,05$, the conclusion is has defferenty sudied output before and after apply cooperatif learning tipe jigsaw in experiment class, has diffrently of gain score average studebt's studied output in vocational subject and entrepreneur learning main sub marketing planning in class experiment has $N$-Gain 0,350 whereas in control class has N-Gain sebesar 0,222 . Whereas differently incrase student's activity who apply cooperatif learning tipe jigsaw and conventional learning model after study activity proofe by increase control class $N$-Gain score to $N$-gain score in experiment class is 0,150 . As the end of the research writer suggesting to teacher to creaete efctif and please embience in learning acivity for increase student's studied output.


Key word: cooperative larning tipe jigsaw, student's studied output

