

**THE COMPARISON OF PROBLEM SOLVING SKILLS USING
COOPERATIVE LEARNING JIGSAW APPROACH AND THINK PAIR
SHARE (TPS) APPROACH ON PRISM SUBTOPIC IN VIII GRADE AT SMP
NEGERI 1 TEBING TINGGI**

Yanti Rambe (ID. Number 408 111 024)

ABSTRACT

The purpose of this research is to know whether cooperative learning jigsaw and think pair share (TPS) approaches can increase problem solving skills of student, is there any difference of problem solving skills of student using cooperative learning jigsaw and think pair share approaches, what kinds of mistake that student made in solving problem using cooperative learning jigsaw and think pair share approaches on prism sub topic in VIII grade at SMP Negeri 1 Tebing Tinggi.

The population of this research is all students in VIII grade at SMP Negeri 1 Tebing Tinggi that divided into four classes. The sample of this research is 52 students that divided into two classes; those are 26 students in VIII-1 was taught using cooperative learning jigsaw approach and 26 students in VIII-2 was taught using cooperative learning think pair share (TPS) approach.

Analysis result of gain for problem solving using t testing with significant level $\alpha=0,05$ for the first hypothesis is $t_{\text{calculate}} = 14,7639$ and $t_{\text{table}} = 1,706$, so that $t_{\text{calculate}} > t_{\text{table}}$. So, Cooperative learning jigsaw approach can increase problem solving skills of student on prisms subtopic in VIII grade at SMP Negeri 1 Tebing Tinggi. For the second hypothesis, $t_{\text{calculate}} = 6,1916$ and $t_{\text{table}} = 1,706$ so that $t_{\text{calculate}} > t_{\text{table}}$. So, cooperative learning Think Pair Share (TPS) approach can increase problem solving skills of student on prisms subtopic in VIII grade at SMP Negeri 1 Tebing Tinggi. For the third hypothesis, $t_{\text{calculate}} = 2,324$ and $t_{\text{table}} = 2,008$ so that $-2,009 < t_{\text{calculate}} < 2,009$. Because of that, the criteria $-t_{\alpha/2(50)} < t_{\text{cal}} < t_{\alpha/2(50)}$ is rejected. So, there is significant difference of problem solving skills that taught using cooperative learning jigsaw approach and Think Pair Share (TPS) approach on prism subtopic in VIII grade at SMP Negeri 1 Tebing tinggi.

The kinds of mistake that student made after taught using jigsaw approach are: (a) errors in determining the height and base of prism, the height of triangle and trapezoid, and drawing the prism, (b) wrote not complete information from the problem, (c) wrote wrong formula of surface area, volume and the height of prism, (d) wrote not complete strategy to solve the problem, (e) errors in calculation and algebra operation, (f) errors in calculating area and perimeter of prism base, (g) errors for using Pythagorean theorem, (h) did not make re-evaluation correctly.

The kinds of mistake that student made after taught using think pair share approach are same with jigsaw approach, but they did not make errors in determining the height and base of prism.

Key Words: *Cooperative Learning Jigsaw Approach, Cooperative Learning Think Pair Share approach, Problem Solving Skills*