

**THE COMPARISON OF CONCEPTUAL UNDERSTANDING ABILITY
OF STUDENTS USING CREATIVE PROBLEM SOLVING (CPS)
APPROACH AND PROBLEM BASED LEARNING (PBL)
APPROACH ON QUADRILATERAL TOPIC IN VII
GRADE AT SMP MUHAMMADIYAH 1 MEDAN**

Siti Rahmadani (NIM 408 111 098)

ABSTRACT

Type of this research is experiment research and has done at SMP Muhammadiyah 1 Medan which aims to know the improving of students' conceptual understanding ability that taught by CPS approach and PBL approach at quadrilaterals' topic in VII grade of SMP Muhammadiyah 1 Medan academic year 2011/2012.

Population in this research is all of students in VII grade of SMP Muhammadiyah 1 Medan academic year 2011/2012 that consist of four classes whereas it only took 50 students as a sample and divided by two classes. One class is first experiment class consist of 25 students have taught by CPS approach and the other is second experiment class consist of 25 students have taught by PBL approach. Instrument have used in this research is essay test consist of six questions and which has been validation tested

Result of research and hypothesis test is concluded, CPS approach can improve conceptual understanding ability of students in mathematics at quadrilaterals' topic in VII grade of SMP Muhammadiyah 1 Medan academic year 2011/2012. This case proved from result of hypothesis test where $t_{\text{calculation}}=18.92 > t_{\text{table}}=1.71$. And PBL approach also can improve conceptual understanding ability of students in mathematics at quadrilaterals' topic in VII grade of SMP Muhammadiyah 1 Medan SMP Muhammadiyah 1 Medan academic year 2011/2012. This case proved from result of hypothesis test where $t_{\text{calculation}}=17.96 > t_{\text{table}}=1.71$.

From result of research is also conclude The improving of students' conceptual understanding ability in mathematics using creative problem solving (CPS) is better than problem based-learning (PBL) at quadrilaterals' topic in VII grade of SMP Muhammadiyah 1 Medan academic year 2011/2012. This case proved from result of hypothesis test where $t_{\text{calculation}}=3.764 > t_{\text{table}}=2.012$.

Base on improving of students' conceptual understanding ability both of class so suggest to mathematics' teacher can apply CPS and PBL approach in learning process, although in this research, CPS approach is better than PBL approach. But still consider advantage and disadvantage of that learning approach.

Key word: Conceptual understanding, CPS, PBL