Increasing Students' Problem Solving Ability Through Lesson Study Problem Based Mathematics Learning with a Worked Example Approach

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ABSTRACT

This lesson study activity aims to improve students' problem solving skills through problem based mathematics learning with a worked example approach. The worked example approach is a problem-based learning approach developed based on Cognitive Load Theory. This theory is principled on the characteristics of students' cognitive structures in processing material mathematical problem solving. With mathematical learning designed based on students' cognitive abilities, it is expected that problem-solving abilities as a goal of mathematics learning can be achieved effectively and efficiently.

This lesson study involves mathematics teachers in the city of Yogyakarta. As a teacher model is a mathematics teacher at Yogyakarta State Middle School 15 which is a UNY partner. The lesson study implementation consists of plan-do-see. Plan is a collaborative learning planning activity between a team of researchers and mathematics teachers. Do is the activity of implementing learning and See is an activity of observing and reflecting learning outcomes.

Kata Kunci: Lesson Study, Problem Solving Ability, Problem Based Mathematics Learning, Worked Example