THE IMPROVEMENT OF STUDENTS’ PROBLEM SOLVING SKILLS IN CONCEPT OF SEPARATION METHOD BY USING PROBLEM BASED EXPERIMENTS

ABSTRACT

This research is conducted under the needs of education to solve ineffectiveness of traditional experiment method which could not provide enough facility in developing student skill of problem solving in science Instruction. This research is aimed to investigate the improvement problem solving skill in 1) domain of problem analysis, 2) domain of problem solving planning, 3) domain of conducting problem solving, and 4) domain of problem solving evaluating as the result of problem based experiment implementation. The method which is used in this research is descriptive quantitative method. Sample of research is gained by using purposive sampling which sample is students in higher achiever class of secondary 2 in one of Cambridge based International School in Bandung. According to research result, it can be concluded that the improvement of students’ skill in problem understanding is categorized as low with n-gain value is 0.1. The improvement of students’ skills in problem solving planning domain is classified as medium with n-gain value is 0.6. The improvement of problem solving skill in domain of conducting problem solving is medium with n-gain value is 0.5, and domain of problem solving evaluating improved in high category with value is much as 0.8.

Keyword: Problem based Experiment, Problem Solving Skills, the concept of separation method