

## PROBLEM SOLVING IN ELEMENTARY MATHEMATICS CURRICULUM

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### ABSTRACT

The aim of this study is to investigate the effects of Year 6 Elementary Mathematics Curriculum on problem solving. The study had an experimental design and consisted of a total of 120 students in experimental (60) and control (60) groups. The results of students' problem solving performances indicated some prominent findings. First of all, students in the experimental group were more successful at problem solving than the control group students. Second, although neither group achieved a satisfactory success level ( $\leq 0.75$ ), the results of students in the experimental group were more homogeneous. Similar results were observed in problem solving stages as well. For all steps of problem solving (understanding the problem, devising a plan, carrying out the plan and looking back at work), the success rates of the students in the experimental group were higher than that of the students in the control group. These results suggested that instead of teaching problem solving as a separate subject, it should be taught as a process interwoven into the whole mathematics instruction where all themes include problem solving activities. Therefore, students' problem solving skills can be improved. Furthermore, there was evidence that the students' ability to use problem solving strategies was enhanced in this way.

**Keywords:** Problem solving, elementary mathematics curriculum.