

# DEVELOPING OF MATHEMATICAL PROBLEMSOLVING AT COMPREHENSIVE SCHOOL

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*A problem solving course was planned for the purposes of the study. The aim was to develop the students' problem solving skills and change their attitudes towards mathematical problems. The lessons were integrated with various school subjects.*

## INTRODUCTION

The teaching of problem solving is often overshadowed by routine tasks. Only fast and talented students have time to complete the problem tasks as extra tasks without the teacher's guidance. The problem solving course was planned with materials and lessons plans for the study. It consists of 29 lessons over the period 22.10.-2.12.2003. The teaching of problem solving was integrated with mathematics, Finnish, natural sciences, handicraft and technology.

## METHOD

The research was carried out on grade 6 students (11-years). First the experimental class and the control class took part in an initial measurement; the problem solving test which included various kinds of problem tasks. An experimental class was taught the problem solving course. The course attempted to influence students' attitudes towards the problem tasks. They were taught to use the solving map method as a help to solve problem tasks. After the course the experimental class and the control class took part in a final measurement. After the course the students of the experimental class were interviewed.

## RESULTS

In the problem solving tests the experimental class clearly improves to performance compared to the control classes. In the experimental class the boys were better than the girls and the boys improved their results more than the girls. According to the interviews, the majority of the students feel that their attitudes towards mathematics and problem solving became more positive during the course. The students' problem solving processes become more effective when they adopted solving map-methods. This was clearly visible from the entries in the notebooks which every student made during the problem solving course.

## References: (e.g)

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