

6. Improving Mathematics Problem Solving Through Written Explanations by Janet Schlattmann

In this action research study of two classrooms of 7th grade mathematics, I investigated how requiring written explanations of problem solving would affect students ability to problem solve, their ability to write good explanations, and how it would affect their attitudes toward mathematics and problem solving. I studied a regular 7th grade mathematics class and a lower ability 7th grade class to see if there would be any difference in what was gained by each group or any group. I discovered that there were no large gains made in the short time period of my action research. Some gains were made in ability to problem solve by my lower ability students over the 7 weeks that they did a weekly problem solving assignment. Some individual students felt that the writing had helped them in their problem solving because they needed to think and write each step. As a result of this research I plan to continue implementing writing in my classroom over the entire school year requiring a little more from students each time we problem solve and write.