

Thesis Title Mathematics Problem Solving Processes of Sixth Grade Students
 in Educational Opportunity Schools under the Jurisdiction of the
 Primary Education Office of Kanchanaburi Province

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ABSTRACT

The purposes of this research were to study and compare mathematics problem solving processes of sixth grade students with high moderate and low mathematics learning achievement in educational opportunity schools under the jurisdiction of the primary education office of Kanchanaburi Province

The samples were randomly selected through the stratified systematic sampling technique which consisted of 30 , 71 and 64 students with high , moderate and low mathematics learning achievement respectively in educational opportunity schools. The data were obtained through two sets of research instruments : problem solving process test and interview. Statistical analysis was accomplished by percentage and t-test. The results of the study were :

1. Most students used all the four steps processes of mathematics problem solving , which were (1) understanding the problem (2) devising a plan (3) carrying out the plan and (4) checking the answers. Most students with high mathematics learning achievement used all the four steps processes of mathematics problem solving correctly. Whereas most students with moderate and low mathematics learning achievement used all the four steps processes of mathematics problem solving incorrectly.

2. Problem solving method in the first step which was understanding the plan , most students used drawing a picture , making a list , writing statements of the problem and equation. In the second step which was devising a plan , most students used writing symbolic sentence , making a list , established a table , trial and error , writing equation and un-identified the procedure. In the third step which was carrying out the plan, most students used calculating , counting and un-identified the procedure. In the

fourth step which was checking the answers , most students used reflect thinking , repeated calculation and un-identified the procedure.

3. Comparing the ability to perform the problem solving processes of the students classified by high moderate and low mathematics learning achievement , it was found that the students with high and moderate as well as the students with high and low mathematics learning achievement were able to perform the problem solving processes differently at the .05 statistical significant level. Obviously the group of students with high mathematics learning achievement had higher ability to perform the problem solving processes than the others. Whereas the students with moderate and low mathematics learning achievement were able to perform the problem solving processes indifferently at the same statistical significant level.