



**EFFECTS OF INSTRUCTION USING POLYA'S PROBLEM-SOLVING  
MODEL ON MATHEMATICAL ACADEMIC ACHIEVEMENT AND  
ANALYZING ABILITY OF THE FOURTH GRADE  
STUDENTS, BHUTAN**

**BY**

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The study was one group experimental design. It was carried out to find out the effects of Polya's Problem-Solving Model on Mathematical academic achievement and analyzing ability of the fourth grade students of Trongsa Primary School, Trongsa. Purposive sampling was adopted to select the sample for the study. Pretest, posttest and time series assessment rubrics were the instrument used to collect data and the data was analyzed using mean and t-test with significant p-value 0.05.

The result of the achievement test scores revealed that the mean scores of the pretest was 6.66 and it increased to 13.78 in the posttest. The conclusion drawn was that the Polya's Problem-Solving Model improved students' academic achievement.

The result of the time series record which was maintained to find out the analyzing ability of the students showed that the total mean scores of all the steps of Polya's Problem-Solving Model were: Step 1. Understand the problem (15.3), Step 2. Devise a plan (15.6), Step 3. Carry out (13.8) and Step 4. Look back (11.9). The result confirmed that the students analyzing ability was increased with the help of Polya's Problem-Solving Model.

Student's Signature.......... Thesis Advisor's Signature..........