COMPARING THE EFFECTIVENESS OF THREE STRATEGIES IN TEACHING SELECTED TOPICS IN MATHEMATICS ON THE STUDENTS' ACHIEVEMENT IN AND ATTITUDE TOWARD MATHEMATICS

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ABSTRACT

An experiment was conducted to compare the effectiveness of three strategies in teaching Mathematics to First Year students of LPNHS-Main during the Third Grading Period, SY 2011-2012. Specifically, this study sought answers to the following objectives: (1)Identify the achievement in and attitude toward Mathematics of the respondents in each group before and after the experiment; (2) Determine if significant difference exists between the pretest/posttest mean scores of the three paired groups in terms of their achievement/attitude toward Mathematics;(3) Determine if significant difference exists in the pretest and posttest mean scores of the students in each group in terms of their achievement in/ attitude toward Mathematics. Likewise, Quasi- Experimental design was used to compare the effectiveness of the three strategies. The data were analyzed by using descriptive statistics, the independent and dependent sample t-test and ANCOVA to test for significant difference of the pretest and posttest means of the three groups. Findings revealed that there is a significant difference in the pretest and posttest mean achievement scores of each group. The group exposed to the manipulative materials obtained the highest mean gain. Also, after the treatment using the three strategies, none of the groups indicated a favorable change in their attitude toward Mathematics. The findings led to the conclusion that teacher should use manipulative materials more often for the students to better understand mathematical concepts and processes in Algebraic Expressions, Special Product and Factors, and Factoring Polynomial.