Title: The relative effects of inquiry method on the achievement of students in senior secondary school mathematics

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Abstract:

This study investigated the relative effectiveness of inquiry method of teaching on senior secondary school one students' achievement in algebra. The study was carried out in Onitsha education zone of Anambra state. four schools were selected out of 32 secondary schools in Onitsha education zone. These 32 schools were stratified according to gender. Two male and two female schools were selected by balloting from each stratum. The study has a sample size of 120 SS1 students randomly selected. The study was carried out using a quasi-experimental design. The scope of the content covered: i. Solution of simple linear equations ii. Solution of linear equations involving fractions iii. Addition and subtraction of algebraic fractions iv. Change of subject of formula. The experiment was carried out by a teacher whom the researcher trained. The instrument (AMAT) constructed by the researcher was administered as pre-test and post-test before and after the experiment. An internal consistency of 0.53 was obtained using K-R 20. This experiment lasted for four weeks of nine periods. The scores were collected after administering the instrument. The research questions were answered using mean and standard deviation while the analysis of variance (ANOVA) and chi square test were used in testing the null hypotheses. The results of the study showed that there is a significant difference between inquiry and expository methods in the mean achievement of students. Also at improving academic performance of students in algebra. Lastly, the male students benefitted more than the female counterparts in the inquiry approach. It was recommended among other things that teachers should adopt inquiry approach in teaching algebra.

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