

Effect of Cooperative Learning Strategy on Mathematics Achievement and Retention of Senior Secondary School Students of Different Ability Levels in Taraba State, Nigeria

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Abstract : The study investigated the effect of cooperative learning strategy on mathematics achievement and retention among senior secondary school students of different abilities in Taraba State Nigeria. Cooperative learning strategy could hopefully contribute to students' achievement which will spur the teachers to develop strategies for better learning. The quasi-experimental of pretest, posttest and control group design was adopted in this study. A sample of one hundred and sixty-four (164) Senior Secondary Two (SS2) students were selected from a population of twelve thousand, eight hundred and seventy-three (12,873) SS2 Students in Taraba State. Two schools with equivalent mean scores in the pre-test were randomly assigned to experimental and control groups. The experimental group students were stratified according to ability levels of low, medium and high. The experimental group was guided by the research assistants using the cooperative learning instructional package. After six weeks post-test was administered to the two groups while the retention test was administered two weeks after the post-test. The researcher developed a 50-item Mathematics Achievement Test (MAT) which was validated by experts obtaining the reliability coefficient of 0.87. Mean scores and standard deviations were used to answer the research questions while the Analysis of Co-variance (ANCOVA) was used to test the hypotheses. Major findings from the statistical analysis showed that cooperative learning strategy has a significant effect on the mean achievement of students as well as retention among students of high, medium and low ability in mathematics. However, cooperative learning strategy has no effect on the interaction of ability level and retention. Based on the results obtained, it was therefore recommended that the adoption of the use of cooperative learning strategy in the teaching and learning of mathematics in senior secondary schools be initiated, maintained and sustained for the benefit of senior secondary school students in Taraba State. Periodic Government sponsored in-service training in form of long vacation training programme, workshops, conferences and seminars on the nature, scope, and use of cooperative learning strategy should be organized for senior secondary school mathematics teachers in Taraba state.

Keywords : ability level, cooperative learning, mathematics achievement, retention

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