Abstract

Achievement in Mathematics at Kenya Certificate of Secondary Education (KCSE) examinations has been poor over the years. The low achievement has partly been blamed on teaching methods which do not actively involve learners in the learning process depriving them of taking charge of their learning. The aim of this study was to investigate the effectiveness of cooperative learning strategy in enhancing students' attitude in Mathematics in secondary schools in Meru South SubCounty. The study employed the Solomon Four-Group, Nonequivalent Control Group Design. The target population for the study was 2430 form three students in 44 co-educational secondary schools in Meru South Sub-County. The sample comprised of 164 form three students from four coeducational schools within the Sub-County. Random sampling was used to select the four schools from a list of prequalified schools. Prequalification was done based on number of students, students' entry behaviour, availability of teaching/learning resources and teachers' qualification. Simple random sampling technique was used to assign participating schools to experimental and control groups. A Mathematics Achievement Test (MAT) and Students' Attitude Questionnaire (SAQ) was administered to assess the students' achievement and attitude towards Mathematics. The instruments were piloted in Maara Sub-County in a co-educational secondary school with similar characteristics as the sampled schools. The reliability of the research instruments was estimated using Cronbach's Alpha. A reliability coefficient of 0.82 for SAQ and 0.79 for MAT was obtained. Validity of the instruments was ensured through expert judgment. Data was analyzed using both descriptive and inferential statistics. The difference between group means was checked for statistical significance using ttest, ANOVA and ANCOVA. The hypotheses were tested at α =0.05 significance level. Means were separated using Least Significant Difference (LSD) pair wise post-hoc comparisons. The study found that cooperative learning strategy was more effective than conventional teaching in enhancing students' attitude towards Mathematics in secondary schools.