Enhancing Learning Outcomes in Mathematics through Classroom Talk Teaching Strategy

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Abstract

At the time of writing, mathematics achievement locally and globally in primary schools is at its knees. Finding from ‘Trends in International Mathematics and Science Study’, (2015), revealed that mathematics attainments continue to lack behind globally among other subjects despite governments efforts and other international bodies. ‘Talking’ with partners while working out mathematics activities has been proven to enhancing students’ learning outcome and their mathematical understanding. However, studies has shown that in primary schools, kids often do not get room to ‘talk out’ mathematics undertakings amongst themselves and with their teachers. The reason being teachers are either ignorant or unaware of the place of talk in teaching –learning process and therefore do not provide their learners with opportunity to talk whereas working out mathematics activities. This study investigated the effect of classroom talk teaching model on mathematics academic achievements among primary school pupils. Using experimental design method, the study compared two groups: (a) experimental and (b) control group. A total of 140 (70 experimental and 70 control group) grade six pupils from public primary schools participated in this study. Data was collected by administering a pre-test (before intervention) and a post-test of a standardized achievement exam to both experimental and control groups. The data was then analyzed using ANCOVA. After the test on the study sample and the statistical processing, the results revealed that:

1. There is a significant effect of ‘classroom talk strategy’ on mathematics academic achievement in primary school, Kenya.
2. There is no significant difference in mathematics academic performance between Girls and Boys, Small and big classes taught using pupils talk strategy in primary school, Kenya.

Based on the results, the study concluded with relevant recommendations regarding the teaching of mathematics.

Keywords: Classroom Talk and Work Model, Mathematics, Pupils Talk, Experimental Research, Academic Achievement.