

## **Application of GeoGebra into Teaching and Learning of Linear and Quadratic Equations amongst Senior Secondary School Students in Fagge Local Government Area of Kano State, Nigeria**

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**Abstract :** This study was carried out in order to investigate the effectiveness of GeoGebra software in teaching and learning of linear and quadratic equations amongst senior secondary school students in Fagge Local Government Area, Kano State-Nigeria. Five research items were raised in objectives, research questions and hypotheses respectively. A random sampling method was used in selecting 398 students from a population of 2098 of SS2 students. The experimental group was taught using the GeoGebra software while the control group was taught using the conventional teaching method. The instrument used for the study was the mathematics performance test (MPT) which was administered at the beginning and at the end of the study. The results of the study revealed that students taught with GeoGebra software (experimental group) performed better than students taught with traditional teaching method. The t- test was used to analyze the data obtained from the study.

**Keywords :** GeoGebra Software, mathematics performance, random sampling, mathematics teaching

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