

**Effects of Interactive Materials' Intervention on Senior Secondary School Students'
Academic Achievement in Set Theory in Oyo South Senatorial District, Oyo State**

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Certification

This is to certify that this study on **Effect of Interactive Materials' Intervention on Senior Secondary School Students' Academic Achievement in Set Theory in Oyo South Senatorial District, Oyo State** was carried out by Omenihu George ODUALI with Matriculation Number LCU/PG/001114 in the Department of Science Education, Faculty of Education, Lead City University, Ibadan, Oyo State, for the award of Master's Degree (M.Sc. (Ed.)) in Mathematics Education and that this has not been previously submitted.

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Dedication

This research work is dedicated to Almighty God for being there for me in the course of this study.

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Abstract

Set Theory as a topic in Mathematics in Senior Secondary School that has poised itself as an unclear topic to students due to the unavailability of appropriate interactive materials to teach the topic which in succession leaves the students with limited or no understanding of the topic. This study investigated the ‘Effect of Interactive Materials Intervention on Senior Secondary School Students’ Academic Achievement in Set Theory in Oyo South Senatorial District. A 2x2x3 quasi-experimental design which involved pretest, posttest and intact group was used for the study. Eighty-five (85) Senior Secondary School Two (SSS2) Students were used from two Senior Secondary Schools. One research question and three hypotheses tested at 0.05 level of significance guided the study. Data were analysed using t-tests and ANCOVA. The results revealed that there was a significant effect of interactive materials’ intervention on the academic achievement of Set Theory in Oyo South Senatorial District ($F_{(1,82)} = 50.317, P < 0.05, n^2 = 0.380$), there was no significant main effect of gender on senior secondary school students’ academic achievement in set theory in Oyo South Senatorial District ($F_{(2,81)} = 2.545, P > 0.05, n^2 = 0.059$); there was no significant interaction effect of intervention and gender on Senior Secondary School Students’ academic achievement in set theory in Oyo South Senatorial District ($F_{(1,80)} = 2.758, P > n^2 = 0.033$); there was no significant interaction effect of intervention and subject combination on Senior Secondary School Students’ academic achievement in set theory in Oyo South Senatorial District, Oyo State. It was recommended that curriculum planners and policy makers should make the use of interactive materials a vital part of Mathematics training programs.

Keywords: Interactive Materials, Intervention, Mathematics, Set Theory, Senior Secondary School

Word Count: 280

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