## ACCESS, USE AND CHALLENGES OF ADOPTING TESSA SCIENCE OER BY BASIC SCHOOL SCIENCE TEACHERS IN GHANA

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## ABSTRACT

The study was conducted to explore basic school Integrated science teachers' use of Teacher Education in Sub-Saharan Africa (TESSA) Open Educational Resources (OER), and the challenges associated with the use of the innovation during classroom instructions. A mixed method approach with sequential explanatory design was adopted for the study. The census sampling technique was used to obtain a sample of 134 basic school Integrated science teachers in the Effutu Municipality for the study. Data was collected using a questionnaire, interview guide and documents. The analysis of quantitative data involved the use of multiple statistical procedures; frequency counts, simple percentages, and standard deviation, while the thematic and content analysis approaches were used to analyse the qualitative data. The study revealed that 14% of the teachers often use the TESSA materials in their classroom instructions. The study also revealed that the contents of the TESSA science materials address the concepts in the Ghanaian Integrated science syllabus and hence promotes active learning among students. However, teachers indicated among other things that, the cost of internet data, time and inadequate knowledge to incorporate TESSA OERs into lesson plans were their major challenges. It was therefore recommended that hard copies of the TESSA modules should be provided to the teachers by the TESSA consortium or by the Effutu Educational Directorate to curb the cost involved in accessing the material for teaching.

Keywords: TESSA OERs, Basic school, Integrated science teacher, Open Educational Resources.