

LEVEL OF EXPOSURE AND EFFECTIVE USAGE OF BIOLOGY LABORATORY FACILITIES BY TEACHERS: EVIDENCE FROM SELECTED SENIOR HIGH SCHOOLS IN CENTRAL REGION, GHANA

Rosemary Naana Kumi-Manu¹, Collins Owusu-Fordjour², Ruth Otison Asante³, Elizabeth Konadu⁴

¹ Department of Biology Education, University of Education, Winneba, Ghana West Africa

² Department of Integrated Science Education, University of Education, Winneba, Ghana West Africa

³ College of Distance and e-Learning, University of Education, Winneba, Ghana West Africa

⁴ Seventh Day Adventist Senior High School, Gomoa Jukwa, Central Region, Ghana West Africa

Corresponding author: cofordjour@uew.edu.gh

ABSTRACT

The thrust of the study was to explore the level of exposure and effective usage of biology laboratory facilities by teachers from selected Senior High Schools in the Central Region of Ghana. This study was carried out in all 40 of the 'Category C' Senior High Schools in the region. A descriptive survey design with questionnaire and a Biology Laboratory Facility Checklist (BLFC) were used as data collection instruments. A total of one hundred and twenty (120) respondents comprising three biology teachers from each of the schools, were purposively sampled. Coding schemes were developed to organize the data into meaningful categories. This involves data obtained from the biology laboratory facility checklist and questionnaire. The categorised data were converted into frequency counts and simple percentages. The study discovered that teachers found it very difficult to teach and conduct regular laboratory exercises with their students due to the heavy workload on them. Also, the lack of adequate laboratory equipment and materials is a major contributing factor to teachers' reluctance to conduct laboratory exercises. Lack of teachers' motivation is also a factor that prevents them from conducting laboratory exercises. It is therefore recommended that enough laboratory materials should be provided in various schools and also teachers should be motivated to ensure effective science practical work.

Keywords: Laboratory, Facilities, Biology, Exposure, Effective