

ABSTRACT

Relationships Among Selected Students' Variables and a Sample of Eleventh Graders' Performance on Respiration

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This study aimed at establishing (a) if the level of selected Jamaican grade eleven students' performance on the topic respiration was satisfactory or not, (b) if there were significant differences in the students' performance on respiration based on differences in their gender, cognitive ability, school location, socio-economic background, school type and self-esteem and (c) if there were relationships among the students' gender, cognitive ability, school location, socio-economic background, school type and self-esteem and the knowledge of the respiration concept.

The sample consisted of 500 Jamaican grade 11 students selected from 16 traditional high and new secondary schools from six Jamaican parishes. The subjects included 119 students from all-boys' schools, 159 from all-girls' schools and 222 from co-educational schools. A 40- item multiple- choice test on respiration and a self-esteem questionnaire were used to collect the data.

The results indicated that the students' performance on the respiration concept was "barely" satisfactory, there were no significant differences in their performance on the respiration test based on their gender, cognitive ability, school location, socio-economic background, school type and self-esteem, but there were significant differences in their

performance based on (a) cognitive ability in favour of students with high cognitive ability in biology, and (b) school type in favour of students in the all-boys' schools; there was no significant relationship between the students' (a) gender, (b) school location, (c) socio-economic background, and (d) self-esteem and their performance on respiration. However there was a positive, statistically but weak relationship between the students' (a) cognitive ability and (b) school type and their performance on respiration.