ABSTRACT


BETTY MCDONALD

Additional Mathematics, a two year course which commences at the Form 4 Level of Secondary School, has been viewed as a pre-requisite for Advanced Level Mathematics at Form 6. The study seeks to investigate the extent to which this is reasonable. A sample of 177 students of a seven year government, co-educational secondary school with a broad-based curriculum and which has a wide catchment area for intake, was chosen. Within the sample, sub-sample A represents students who studied both Additional and Advanced Level Mathematics while sub-sample B represents those who did not take Additional Mathematics before attempting Advanced Level Mathematics. Both groups attempted Caribbean Examination Council (CXC) Ordinary Level General Proficiency Mathematics. Sub-sample A comprised 160 students and sub-sample B 17 students.
Instruments used for the study were semi-structured interviews with school personnel, school examination records and opinionnaires to content specialists. Results showed high validity and reliability of the three examinations used in the study. Levels covered in the cognitive domain, verbal content, pure and applied components and the traditional and modern approaches to the subject have been discussed. Grades used were quantified by a numerical scale.

Findings suggest Additional Mathematics a better predictor of success at Advanced Level (A Level) Mathematics than CXC Ordinary Level (O'Level) with the Comprehension profile of the latter making the greatest contribution. Mean grades of males suggested better performance than females, although there is a steady increase in the number of successful female students who write the examination. Thus, Additional Mathematics as a prerequisite for Advanced Level Mathematics appears to be reasonable.