ABSTRACT

ENTRY CHARACTERISTICS AND PERFORMANCE OF A COHORT
OF ENGINEERING STUDENTS, AT THE COLLEGE OF ARTS,
SCIENCE AND TECHNOLOGY

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This study examined selection and performance of a single year's entry (1980) into the Engineering Department of the College of Arts, Sciences and Technology and reviews the students' progress through the three years of their programme. Attention was focussed on past academic achievement, past educational background, technical bias and sex of students. These constituted the independent variables with performance in engineering years 1, 2 and 3 being the dependent variables.

The data collected for the sample which consisted initially of 100 students but was gradually reduced yearly to 72 in year 3 because of student drop-out, were analysed in response to stated research questions.

The main findings are:

i. For all students who completed the course (completers), as well as sub-samples - Technical High School/Traditional High School - past academic achievement was significantly correlated with performance in years 1 and 2 of the engineering programme.

ii. For students who did not complete the course (non-completers), past academic achievement was not significantly related to any of the performed variables.

iii. For neither group of students, completers or non-completers, did technical bias display a significant correlation with performance in engineering.
iv. For completers overall, non-completers who left college at the end of year 2, as well as the sub-samples of completers from Technical and Traditional High Schools, the college performance variables were strongly and significantly intercorrelated.

v. Completers from the Technical High School scored significantly higher on Technical bias than their Traditional High School counterparts; however, the latter group had exhibited a significantly higher level of academic achievement, prior to college entry than the former.

vi. No significant difference in students' performance in engineering was found between students who had attended the different school types.

vii. From limited data indications are that there may be no difference between men and women in performance in engineering

In view of these outcomes and their significance to education in Jamaica, a number of recommendations were made.