Abstract

Assessing the Failure Rate in the Caribbean Secondary Examinations Council (CSEC) Mathematics in the Public and Private Secondary Schools of Trinidad and Tobago

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This study assessed the failure rate in CSEC Mathematics examination along three factors, these were: Type of School, Gender and Type of Mathematics Profile. The objective of this study was to determine the factors associated with the failure rate in CSEC Mathematics.

Prestige, Non-Prestige and Private schools were used in this study. Data was entered in SPSS and Minitab. Cross tables, Chi-Squared test, Logistic Regression, Non-Parametric tests and ANOVA were used to analyze the data.

In 2005 there were a higher percentage of boys failing Mathematics (94.9%) than girls (92.5%) at the Non-Prestige school. In 2006, at the Non-Prestige school there a higher percentage of girls failing Mathematics (94.7%) than the boys (91.3%), whilst for the Prestige school there was a higher percentage of boys failing Mathematics (16.7%) than the girls (14.8%). In 2007, for the Private School there were a higher percentage of girls failing Mathematics (24.5%) than the boys (14.6%). For the Non-Prestige school all the boys had failed Mathematics. In the Prestige school there was a higher percentage of girls failing Mathematics (24.5%) than the boys (14.6%). The chi-squared test showed that the school type influenced failing Mathematics; gender did not affect failing Mathematics; gender influenced passing reasoning in Mathematics and the Mathematics profile scores; passing Mathematics was associated with passing English; passing reasoning in Mathematics was associated with passing reasoning in English. The Logistic regression showed that Mathematics profiles were the predictors of the failure rate in Mathematics. The Non-parametric tests showed that the Mathematics profiles contributed to the failure in Mathematics and Comprehension was the weakness that students had. ANOVA showed that the number of subjects taken by the students that failed Mathematics did not affect passing English.

In conclusion, the Mathematics profiles were the factors of the failure rate and teaching strategies must focus on Comprehension.

Keywords: Sudesh Seegobin; Failure Rate in Mathematics; public and private secondary schools; Chi-Squared test; ANOVA; Non-Parametric tests; Logistic Regression; gender; Mathematics profiles; comprehension; computation; reasoning in Mathematics, reasoning in English.