

An Investigation of Prior Educational Achievement on Engineering Student Performance

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Abstract : All universities possess a standard by which students are assessed and administered into their programs. This paper considers the effect of the educational history of students, as measured by specific subject grades in Caribbean examinations, on overall performance in introductory engineering math and mechanics courses. Results reflect a correlation between the highest grade in the Caribbean examinations with a higher probability of successful advancement in the university courses. Alternatively, lower entrance grades are commensurate with underperformance in the university courses. Results also demonstrate that students matriculating with the Caribbean examinations will not necessarily possess a significant advantage over students entering through an alternative route, and while previous educational background of students is a significant indicator of tentative performance in the University level math and mechanics courses, it is not the sole factor.

Keywords : bimodal distribution, differential learning, engineering education, entrance qualification

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