

ABSTRACT

This study looks at the 1983/84 entrants to the Faculty of Natural Sciences, Mona, University of the West Indies, and the students taking Preliminary subjects in 1983/84.

The study found that 88% of the entrants had taken a 2 year 'A' level course before entering University but only 57% of these have 2 or more passes at 'A' level.

For Preliminary Biology, Chemistry and Physics the pass rate was very low for students who did not have 'O' level in the respective subject, and it was higher for those who were granted 'O' level pass in the 'A' level examination than for those who only sat and passed the 'O' level examination, significantly so for Chemistry. For Preliminary Mathematics, the pass rate was lowest for those with only a pass at 'O' level Elementary Mathematics but there was no difference in the pass rates of those with a pass at 'O' level Additional Mathematics, if this was awarded on an 'A' level examination or on an 'O' level Additional Mathematics examination.

The students reading Preliminary Mathematics with only 'O' level Elementary Mathematics were a large heterogeneous group, most of whom, in the previous year, had taken either 'A' levels at school or Preliminary courses at University in other subjects.

It has also been found that some students without any exposure to the 'A' level courses prior to entering the University, were able to pass Preliminary Mathematics due to their determination and good study habits.

In Introductory Physics and Introductory Mathematics, the 'A' level qualifiers did significantly better than the Preliminary level qualifiers.

It is recommended that two parallel Preliminary Mathematic Courses be run: one for those with passes at 'O' level Additional Mathematics and another for those with only 'O' level Elementary Mathematics. The second should be primarily a service course. A similar suggestion is made for two parallel Introductory Mathematic Courses.