
Success Rates: Are They The Same For Different Logic Courses?

Rob Oliver

Christchurch Polytechnic Institute
of Technology.
Christchurch.
New Zealand
Rob.Oliver@cpit.ac.nz

data gathered about common groups of students studying Diploma courses that require a high level of logical thinking and application. The purpose is to prove true or otherwise the perception that students who fail Introductory Programming courses have poor and unclear logic skills and that they will fail other topics that require a high level of logical thinking. To look at the topic another way – is the high failure rate in Introductory Programming courses a ‘programming’ issue or a logic issue and do these failures show in other logic based courses?

- The same student set in the same year for different logic based courses
- The same student set in the same year for different logic based courses for different pass grades
- The same course for different student sets over several years.
- The same course for different student sets over several years for difference pass grades

Abstract

This poster provides detailed analysis of the

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Keywords

Programming, Success Rates, Introductory Courses, First Year, Logic

Introduction

It has long been publicised that Introductory Programming courses have high failure rates. But is this really the case. What are the success rates involving other courses that are 'logic based'. Is programming any different? Really it is only the use of logic in a different manner. Courses used for analysis were a mixture of level 4 and level 5 and are as follows: NDPP490, NDSP590, NDSP592, NDOS500, NDNM500, NDBA500

Methodology

The grades of the same set of students for any year have been analysed over six different logic intensive courses. The same procedure has been used over five successive years.

The results of this analysis have been graphed in a number of ways. These results are the raw results that reflect each individual student's final grade for any course.

Results

Using the data gathered showed that variations exist within each of the courses. There were no perfect overlays of results for any group of the same students. Certainly more analysis needs to be performed on the results to be able to state any definite conclusions. This will be the subject of a further poster.

Conclusion

Further research needs to be done to be able to draw accurate conclusions that may be able to be used in the prediction of success for students studying logic based courses.