

Cambridge, Schools and The University of Auckland

Some recent research from The University of Auckland has generated interest for the comparisons it made between the National Certificate in Educational Achievement (NCEA) and Cambridge International Examinations (CIE) in predicting performance at University.

Unfortunately, the research has been mis-interpreted and as a result, may have caused some concern for those who are interested in choice of schools.

This article provides a brief explanation of the research and what can and cannot be drawn from the findings.

Over 50 schools in New Zealand are registered to offer CIE. Some offer CIE alongside NCEA while some offer CIE exclusively. Both CIE and NCEA results are used as criteria for selection for University.

The research paper is part of the ongoing work of Starpath:Project for Tertiary Participation and Success. Starpath is a Partnership for Excellence led by The University of Auckland in partnership with the Government aiming "to produce practical strategies for schools and tertiary institutions that will achieve a step-change in current patterns of educational under-achievement." The key aim of the research paper was to see how NCEA results could be used so as to maintain university standards but ensure a fairer and broader mix of students are selected for university. An additional aim was to compare how CIE and NCEA results correlated with first year results. The paper is in an unpublished form and has yet to be subject to peer review.

The paper examined results of students entering The University of Auckland. It compared how NCEA and CIE results by student correlated with students' first year university grade point average (GPA). The paper experimented with ten different models (methods) of summarising the NCEA results using a sum of all results, or a simple grade point average. No attempt was made to test different CIE models. The paper reported that "the best of the NCEA models is more effective in predicting first year students' GPA during their firstyear at University than CIE".

A number of important qualifications should be placed on this approach. The comparison of the NCEA model and the CIE model is between the best of the NCEA models and the raw unadjusted results from CIE. Furthermore, the sample used is not random. As noted in the paper, CIE students tend to achieve better university results. CIE students are moreover likely to differ from NCEA students in regard to schools attended, social and demographic background and the courses selected. Finally, the data used is drawn from the first year of introduction of CIE into New Zealand.

More importantly is the interpretation of results. There are two key points of note. Firstly, the research did not consider how well CIE and NCEA systems *prepare* students for university. The correlation results do not measure preparation. For example, we might see a very low correlation from a system which prepared students very well so that they all obtained high marks at university. Thus the research does not explicitly provide any detailed information on the success of the NCEA students relative to CIE students. Rather it only briefly comments that CIE students tend to achieve better university results.

Secondly, the study assesses NCEA's ability to predict firstyear university GPA. Alternative measures of students' success are however not reviewed, including success in later years of University or success once students have graduated from University.

As noted in the research, CIE students on average performed better at University. While these are pleasing results for CIE, it cannot be interpreted to mean that CIE is better at preparing students. The group of CIE students is not a random sample of all students. They may perform better because they go to different schools, have higher levels of ability or have more resources at their disposal.

Cambridge International Examinations is interested in the Starpath research and would like to review it. CIE is also interested in carrying out research to improve the understanding of how the CIE and NCEA systems compare in selecting and preparing students for higher education. All that can be said at this stage is "Watch this space".

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