



New Zealand Council for Educational Research

From Cabbages to Kings: A First Report

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Introduction

This short report summarises the initial findings from a three-year longitudinal study currently being undertaken by the NZCER. The full project title is:

Learning Curves: Meeting student needs in an evolving qualifications regime

The research is set against the background of the introduction of the new senior secondary school qualifications regime, the National Certificates of Educational Achievement (NCEA). For three consecutive years NZCER is exploring the manner in which student subject choice at Year 11 changes in response to the implementation of the NCEA reforms.

Case study schools

Data is being gathered in six case study schools. These schools are similar in size, but have been selected to represent a diversity of student groups and contextual settings. Three are city schools and three are in rural towns. Four are co-educational, two are single sex. Initial visits to each school were carried out during March - April 2002. The principal and five selected Heads of Department were interviewed in each school (HoDs of English, Mathematics, Science, Technology and the Arts curriculum areas). Via a written questionnaire, Year 11 students were surveyed about their decision-making and opinions on the subject choice options available to them. School timetable and subject choice policy and procedure information was collected during or after the visit.

The initial report describes how the six selected schools have endeavoured to meet their Year 11 students' needs through the subject choices offered to them in the 2002 year. The overall subject choice regime at each school, from Years 9 – 13, is summarised to provide a context for discussion of Year 11 options. While there are many similarities between the schools, differences of approach to student subject choice have emerged within the rich context of each school's particular circumstances, vision, and constraints.

Why “cabbages” and “kings”?

The title of the report *From Cabbages to Kings*, captures an intention to break down distinctions between “academic” and “cabbage” subjects, as these are perceived by students and, on occasion some parents and teachers. In all six schools the NCEA reforms are seen to be providing a qualifications structure within which students from the lower end of the ability spectrum can be encouraged to value their learning and to raise their achievement levels. The NCEA changes to the assessment of student learning are also seen to have the potential to raise achievement levels for the most able students, challenging them to meet “excellence” levels that, in some respects, demand more of them than traditional examination based assessments.

Changes related to subject choices

There are two main ways in which NCEA changes in assessment for senior qualifications are having an impact on student choices in relation to their learning needs. Within the compulsory subjects, choice is being opened up through the provision of a wider range of *alternatives* (for example three different versions of Year 11 mathematics). Where students can choose amongst different subjects, choice is being opened up through the provision of a wider range of subject *courses* (for example geography as a separate course, or as part of a course called humanities).

All six schools have used the NCEA changes to increase the number of alternatives within the compulsory subjects. All now offer three mathematics alternatives, two English alternatives and, in five of the schools, two science alternatives. They encourage students into the alternatives perceived to best meet their learning needs, with varying degrees of compulsion.

Some schools are also widening the range of subject courses in response to the NCEA changes. Total numbers of available courses at Year 11 range from 22 to 32. Technology is the curriculum area that offers the widest range of courses. One school offers eleven different Year 11 courses under the technology umbrella, although some of these are computing courses. (Some types of computing courses are not considered to be 'technology' courses in the sense intended by *Technology in the New Zealand Curriculum*, but they tend to be placed in this curriculum area for organisational purposes.) In some schools new courses in the Arts curriculum area are now available or being considered, and these are very popular with some students. Innovative courses in the social sciences are now offered in three of the six schools. Two schools offer vocational options at Year 11, although these types of choices more typically open up at Year 12.

All the principals expressed appreciation of the widening possibilities for students to attain qualifications credits for learning in 'alternative' types of subject options, although several noted that the availability of resources, in particular staffing levels, is constraining the amount and pace of change in this direction.

In the school with the smallest number of subject options the widening of student choice has been envisaged quite differently. In this school choice is located within the range of National Certificates, with the NCEA being seen as just one possible qualification pathway. Within a framework of seemingly conventional 'subjects' quite different combinations of content are being taught and assessed. For students who are 'academic' the NCEA course differs very little from those offered in other schools. The alternative options within a subject, may however, include very different content, assessed by unit standards drawn from a range of National Certificates, as well as some NCEA achievement standards where appropriate.

Students would like more options to be made available in the Arts (especially in areas such as drama and photography – often already available at Years 12 and 13). Some desired a range of other languages, or various vocational options. In addition to the compulsory subjects (English, mathematics, science) students strongly associated visual arts and graphics courses with future career options. Most expected to return to school at Year 12.

Issues emerging from the research to date

1. How much choice is optimal?

Achieving a balance in the selection of Year 11 courses that will engage the students yet keep their educational options as open as possible is a dilemma that is being debated in all six schools. All six schools make considerable efforts to ensure that students make choices appropriate to their individual needs, although many students seem not to be aware of these efforts. Ultimately, no matter how many courses are offered in total, combinations of choices are constrained by each school's option line structure. The more choice students are offered, the more they appear to be encouraged to seek. In the school that offers the most languages, students wanted even more. In the school that offers the most 'alternative' courses, students wanted even more of these.

2. Teacher workloads

The complexity of possible choice pathways within the NCEA is a tension that is contributing to workload pressures for teachers. New courses require a large investment of planning time. Assessment tasks for internally assessed achievement standards, provided by the MOE in support of the NCEA reforms, typically require considerable modification to make them suitable to the learning needs of different student groups. Trials of tasks are seen as essential, although those teachers who have had previous experience of unit standards assessment are more confident in their use of the new tasks and procedures than are the teachers for whom standards based assessment is a new professional experience.

Moderation issues, compounded by the academic/vocational tensions that continue to underpin curriculum debate, are also a significant source of workload pressures for most of the interviewed Heads of Department. Inconsistencies between achievement standards in different subjects were also noted as a concern. For example science and technology have differing guidelines for the awarding of multiple credits for similar practical investigation achievement standards. All six schools are debating how best to structure Year 12 courses to take account of the more detailed records of Year 11 learning that will become available for each student at the end of the 2002 year.

3. Parents' understanding of the reforms

In view of the complexity of possible responses to the NCEA reforms, it seems unsurprising that some parents do not yet appear to understand the full import of the changes. Several schools reported that some parents still retain a traditional reluctance to allow students to take what they see as 'less than academic' courses, perceiving that to do so would be to limit future career options. Students select subjects based on their expectations of personal enjoyment but they also draw on their understandings of their future career/study options. They appear to be more influenced by discussions of their subject choices with their parents than with their teachers or careers advisors, another reason to ensure that parents are well informed.

4. New forms of streaming?

The division of mathematics, English and Science into alternative courses for students of differing *achievement* levels could represent a type of streaming, a development which is of concern to at least one of the principals. Unlike past streaming practices, where students were streamed to particular clusters of subjects perceived to be appropriate for their general *ability*, NCEA changes are streaming individual subjects via these alternative courses. In principle this difference can allow students to study at different levels of challenge in different subject areas. Whether this happens in practice, and any effects on the overall achievement of individual students, will be tracked in future stages of the research.

5. “Intellectualisation” of some subjects

Some aspects of subjects within the technology curriculum area are seen to have been “intellectualised” by the new assessment processes. While this can make these subjects intellectually challenging for able students, there is a concern that the ‘craft’ aspects should also continue to be valued, allowing students who excel in working directly with materials to gain qualification credits for their abilities. There are similar concerns in some aspects of the Arts.

6. New structures for Years 12 and 13

HoDs recognise a need to find new ways of structuring Year 12 courses. Because achievements are reported separately for each achievement standard, NCEA qualifications provide a more detailed profile of actual student achievement in each subject (as compared with a global judgement of achievement afforded by gaining a mark greater than 50%). At the time of interviewing, schools were unsure what the impact of this situation would be on the manner in which they structure Year 12 courses. Several principals foresee a breakdown of distinct year levels in the senior secondary school, with each student studying each subject at the most appropriate achievement level.

What next?

Already at this early stage of the research project, it is clear that the NCEA reform is triggering fundamental changes in relation to meeting student learning needs. Teachers can see the possibilities for enhancing the learning and achievement of a wide range of students. If workload and implementation issues are set to one side, we found positive support for the NCEA related changes to options and courses.

Individual student telephone interviews are currently taking place. We return to the schools in Term One of the 2003 year to monitor further developments.

The full report, *Learning Curves: Meeting student needs in an evolving qualifications regime*, is available at <http://www.nzcer.org.nz/pdfs/11691.pdf> or in hard copy from sales@nzcer.org.nz Price: \$36.00

Also available:

Innovative Pathways from School: The case studies.

Sally Boyd, Sue McDowall, Garrick Cooper

Price: \$45.00 Contact sales@nzcer.org.nz