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Rangahau Mātauranga o Aotearoa

NCEA one decade on

Views and experiences from the 2012 NZCER National Survey of Secondary Schools

Rosemary Hipkins
New Zealand Council for Educational Research

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We are grateful to the Ministry of Education, the Post Primary Teachers' Association (PPTA), the New Zealand School Trustees' Association and the Secondary Principals' Association for their interest in the work and feedback on the questionnaire drafts. PPTA also distributed the teacher questionnaires through their electronic database. Many thanks go to the secondary school principals, teachers, trustees and parents who took the time to complete their respective questionnaires, as well as to the school staff who co-ordinated the distribution of parent questionnaires in their schools. We are very aware of school workloads and we really appreciate the continuing support for the national surveys.

NZCER national surveys are a team effort. My fellow contributors to the design of the questionnaires included Cathy Wylie, Sally Boyd, Karen Vaughan, Rachel Bolstad, Rachel Dingle and Edith Hodgen. Rachael Kearns ably managed the 2012 project in all its stages, with her organisation and determination ensuring a good level of response from parents. Edith Hodgen led the data management and data analysis phases of the project, with support in the later stages provided by Rachel Dingle. Cathy Wylie provided critical feedback on the draft of this report, and Sarah Boyd managed the dissemination of its findings. Christine Williams provided administrative support.

Executive Summary

This report documents the responses to questions related to the National Certificate of Educational Achievement (NCEA) in the 2012 NZCER National Survey of Secondary Schools. Responses from teachers (n = 1,266) and principals (n = 177) predominate, but responses from parents (n = 1,477) and trustees (n = 289) are also used. The samples achieved were broadly representative of each group: details can be accessed in the overview report, on the National Survey project page on NZCER's website.[1]

Support for NCEA

A decade after its inception, support for NCEA has further consolidated. Ninety-five percent of principals, 74 percent of trustees, 69 percent of teachers and 54 percent of parents support it. Support from principals has always been high, trustee support increased a little, and teachers' support remained the same as in 2009. Parent support passed the 50 percent mark for the first time since NCEA's inception and was higher if they had a child in Years 11–13, meaning they would have had direct experience of NCEA. However, only a third of this group of parents said they understood how literacy and numeracy credits are now awarded.

Recent changes in NCEA and the support available for teachers were generally positively received. These include changes to NCEA's processes, a major project to align NCEA with *The New Zealand Curriculum* (*NZC*), and the considerable effort invested by the New Zealand Qualifications Authority (NZQA) in best practice workshops for teachers. For example, 91 percent of principals and 65 percent of teachers see course endorsement as a positive change. Seventy-three percent of principals and 62 percent of teachers are

[1] This overview report is titled *Secondary Schools in 2012*. See Wylie, 2013, available at http://www.nzcer.org.nz/research/publications/secondary-schools-2012

supportive of recent changes to literacy and numeracy requirements. However, just 52 percent of teachers feel that the realigned standards for their subject successfully capture the intent of *NZC*.

Sixty-two percent of teachers had attended a best practice workshop. On the whole, these were very well received: 75 percent of participants gained increased confidence in making assessment decisions, 73 percent gained a better understanding of grade boundaries, and 71 percent gained a better understanding of holistic judgements made on quality rather than quantity. Fifty-six percent of participants agreed that the best practice workshops had boosted their confidence to write their own assessment tasks, and 57 percent said they now had more explicit achievement-focused conversations with their students.

Continuing a trend seen in previous National Survey rounds, support for NCEA was lowest among teachers whose morale was satisfactory or poor. Support was also likely to be low if teachers felt under unfair pressure to boost NCEA results for their students, or if they believed that "there is too much emphasis on student voice and similar ideas nowadays". This item stands as a broad proxy for views about the appropriateness of developing a more student-centred curriculum, as signalled by *NZC*, which emphasises the development of a local curriculum that meets the specific learning needs of every student.

Issues and challenges

NCEA processes have added substantially to teachers' workloads, and this has been an important influence on negative feelings about the qualification. This issue remains unresolved. Sixty-five percent of both principals and teachers were of the view that moderation of assessments takes too much time—about the same proportion as in 2009. However, between 2009 and 2012 there were increases in the proportion of principals, teachers and trustees who thought NCEA workload was a major issue facing the school (49 percent of principals and 58 percent of teachers thought this in 2012.)

Teachers in decile 9 or 10 schools were more likely than other teachers to see NCEA workload and NCEA standards alignment as "major issues facing the school". NCEA workload pressures appeared to be especially acute for faculty leaders and deans, whose leadership work includes many NCEA-related responsibilities. Responses to items that comprised a *Teacher workload* factor, which captured feelings about the fairness and manageability of workload in general, were clearly associated with overall views about NCEA: those who were the most negative about workload were also more likely to be negative about NCEA.

Between 2009 and 2012 there were increases in the proportion of principals, teachers and trustees who saw NCEA driving the curriculum as a "major issue facing the school". NCEA requirements, and the time taken for NCEA assessments, were seen as barriers to curriculum change by 43 percent and 39 percent of teachers, respectively. Teachers who hold the view

that NCEA presents barriers to curriculum change are more likely to be negative about a wide range of aspects of NCEA and its recent changes. Just 52 percent of teachers believe that the new achievement standards created during the alignment process appropriately reflect the intent of the subject they teach. Teachers of social sciences, arts or commerce are more likely to think their subjects have been appropriately aligned, and mathematics, science and computing teachers to think that their subjects have not.

NZC emphasises the importance of creating programmes of learning that meet the needs of every student. Seventy-seven percent of principals and 51 percent of teachers said that NCEA gives them the freedom to design the courses they want to offer. Ninety-one percent of principals, 80 percent of trustees and 59 percent of teachers said the school has good systems for helping students to make NCEA choices that kept learning pathways open. However, the rolling changes to NCEA appear to have widened the already-existing gap between the belief that NCEA motivates high achievers to do their best (51 percent of teachers thought this, up from 21 percent in 2006), and the belief that it motivates lower achievers to do their best (30 percent of teachers thought this, down from 42 percent in 2006). Teachers in decile 1 or 2 schools were more likely than other teachers to agree that NCEA motivates lower achieving students to do their best, and that NCEA gives them freedom to design courses how they want. However, they were less likely than other teachers to agree that course endorsement has been a positive change. Principals of decile 1 or 2 schools were more likely to agree that NCEA-created league tables have had a negative impact on roll numbers.

The survey included several questions about the Government's recently announced policy target that by 2017 85 percent of students should gain an NCEA Level 2 qualification or its equivalent. Just 3 percent of principals and 6 percent of teachers said the policy would not change their planning because the target was unrealistic. Seventy-one percent of teachers and 56 percent of principals said they constantly make changes in an effort to support increased numbers of students to gain NCEA Level 2. Teachers in decile 9 or 10 schools were more likely to say that they did not need to make changes to their practice because the school already met the target of having 85 percent of students gain NCEA Level 2. Fifty-one percent of principals and 31 percent of teachers gave open comments about the policy. Teachers' comments tended to be more negative than those made by principals. Teachers of mathematics, science and computing were more likely than teachers of all other subjects to see this target as unrealistic.

NCEA and teacher professional learning

Sixty-four percent of teachers see the Ministry of Education website, Te Kete Ipurangi, as a valuable source of support and links to information they need. Sixty percent said that professional activities beyond the school (moderation, curriculum alignment work etc.) have stimulated their professional growth. A bare majority said they can easily access a helpful network of teachers in their subject (56 percent) or have found their subject association

really useful (55 percent). Just 36 percent said they can easily access specialist subject advice outside the school when they need this (excluding best practice workshops). Teachers who are active participants in teacher networks, subject associations and other professional activities beyond the school are more likely to agree that they derive learning benefits from moderation-related activities and to disagree that these take too much time. These teachers are also more likely to strongly agree that they have derived the intended benefits from the best practice workshops. Early career teachers are less likely to have taken part in best practice workshops and their responses are characterised by higher levels of uncertainty across a wide range of items. Overall, there are indications that many of them are not yet being included in NCEA-related professional activities in their schools.

Almost all principals (96 percent) said that NCEA class achievement data are discussed in faculty meetings so that teachers can work together on changes to teaching. Eighty-six percent believe that external moderation provides teachers in the school with valuable insights into expected standards of achievement. There was a sharp increase in the proportion of principals who said that the NCEA results of their classes were used when reviewing a teacher's performance (21 percent in 2009, compared with 54 percent in 2012).

Where to next for NCEA?

Teachers who believe that the aligned achievement standards for their subject reflect *NZC*'s intent, and who gave other indications of support for *NZC*'s student-centred vision (e.g., disagreeing that "there is too much emphasis on student voice and similar ideas nowadays"), tend to express stronger support for NCEA. Where NCEA's assessment emphases are seen as reflecting *NZC*'s intent, teachers appear to be better able to absorb workload pressures and positively engage in NCEA-related professional learning opportunities, and their morale is likely to be high.

However, negative views, whereby NCEA and *NZC* are seen as remaining out of step, notwithstanding alignment and other recent changes, are also strongly held, with the opposite set of consequences likely to ensue. Among other associations, these teachers are more likely to feel undue pressure to boost NCEA results, to feel that ambitious student targets are unrealistic, to not support recent changes, to not have benefited from best practice workshops, and to have lower morale. The overall picture painted in this report suggests that it could be futile to expect these teachers to understand and support ongoing work that directly focuses on NCEA itself. Their support and understanding are unlikely to be gained unless, and until, they have a better understanding of the shifts in learning outcomes, and hence assessment emphases, signalled by *NZC* itself.

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1. Introduction

NZCER's national surveys are conducted three-yearly, with the overall aim of documenting how new educational policies and processes play out in practice. They are funded by NZCER's Purchase Agreement with the Ministry of Education. The surveys began in primary schools in 1989, shortly after the start of the *Tomorrow's Schools* reforms. Secondary schools began to be surveyed in 2003, around the time the introduction of NCEA signalled a major shift in policy on assessment for qualifications.

Context

NCEA plays a major role in secondary schools. This is the third in a series of NCEA-specific reports to be developed from the NZCER National Survey of Secondary Schools. NCEA is part of an ambitious series of reforms that actually began a decade before its inception. These reforms began with the development of a seamless National Qualifications Framework, which was intended to span qualifications from senior secondary school (i.e., NCEA) to those gained via various learning pathways in the tertiary sector (both academic and more vocationally based). The subsequent change from a more traditional examination-based qualification system to NCEA also entailed a shift from norm-referenced decision-making to a form of standards-based assessment, which was new to most school professionals at the time.[2]

In 2006 we looked back on the early years of implementation to 'take the pulse' of NCEA as it moved out of its establishment phase (Hipkins, 2007). In 2009, after a series of rolling adjustments to NCEA processes and structures, we reported on its ongoing evolution (Hipkins, 2010c). Now in 2012 we look back across the first decade of NCEA and report on current perceptions of NCEA and how the most recent changes have been perceived.

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[2] In practice the two methods of assessment decision-making are not mutually exclusive, because standards imply the exercise of some type of normative judgement and norm-referenced judgements are often used to determine standards.

Recent changes to NCEA policies and processes

In the three years since the 2009 survey, rolling changes to NCEA policies and processes have continued apace.

- Following the success of endorsing NCEA certificates when individual achievement standards are gained with merit or excellence, processes for endorsing whole courses were introduced.
- A carefully sequenced project to align the achievement standards with *NZC* was carried out over these 3 years.
- Changes were made to the way in which the literacy and numeracy components of an NCEA award are determined, allowing "naturally occurring evidence" to be used. Regulations for determining University Entrance were also adjusted as part of this work.
- Assessment and moderation processes were fine-tuned, with full-time national moderators for individual subjects employed.

The nature of each of these changes is now briefly elaborated to set the context for the sections that follow. This is followed by a short account of an NCEA-related policy introduced by the Government, which aims to see 85 percent of all New Zealand's 18 year-olds achieve a Level 2 NCEA award/equivalent, or better, by 2017.

Course endorsement

The 2009 survey found widespread support for the new provision to endorse certificates with merit or excellence in individual achievement standards, where the quality of a student's work warrants this additional acknowledgement (Hipkins, 2010c). Building on the success of this move, NZQA subsequently devised a process to allow whole courses of study to be similarly endorsed. If enough of the individual standards that students gain within a course have been endorsed with merit or excellence, and provided that at least one of these standards is externally assessed and at least one is internally assessed,[3] the whole course will be endorsed on the student's NCEA certificate with a merit or excellence pass.

The process devised for course endorsement was specifically intended to allow for new types of hybrid courses, provided these were seen to be coherent in their design and intent. For example, an environmental education course might draw standards from science, social sciences and the suite of sustainability standards—even perhaps from mathematics, technology or English, depending on the overall focus and context of the learning envisaged.[4] Such courses challenge the traditional division of the curriculum into a small number of familiar subjects, although many courses will still be of the traditional type.

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[3] The intention here is that neither totally internally assessed nor totally externally assessed courses will be endorsed.

[4] For an extended discussion of the nature of such curriculum flexibility, and why it is now needed, see Bolstad and Gilbert, 2008.

Alignment of NCEA and NZC

At the time of the 2012 National Survey, NZQA and the Ministry of Education were nearing the end of a project to revise the NCEA achievement standards to ensure they matched their appropriate curriculum level. The main aim of this work was to ensure that what was being assessed reflects *NZC*'s messages about important learning in each subject (i.e., the standards would be aligned with the curriculum). The three levels of NCEA were addressed sequentially in a rolling series of changes. This was partly done to ensure that teachers would not be overwhelmed with simultaneous changes at every level, but doubtless there was also a question of resourcing. Leading teachers in each subject area were involved in this work, largely in addition to their existing teaching roles.

During the alignment of NCEA Level 1 with *NZC* Level 6, a number of unit standards were removed. Some of these unit standards duplicated concepts and skills assessed by achievement standards. This was a legacy of earlier trials of a unit standards-based qualification that preceded NCEA. Some were set below *NZC* Level 6 and were removed in the name of maintaining meaningful standards of achievement.[5] Responses to the 2009 National Survey gave indications that teachers thought these decisions would reduce the potential flexibility of NCEA to accommodate the needs of lower-achieving students (Hipkins, 2010c). However, many vocationally oriented unit standards maintained by various Industry Training Organisations are still available. In effect, these changes to the range of available unit standards have sharpened the divisions between academic and vocational pathways through the school. This challenge is discussed in section 4.

Widening approaches used to demonstrate literacy and numeracy

When NCEA was first designed, gaining at least eight Level 1 credits from assessments undertaken in the subject of English was taken as evidence of literacy. Similarly, evidence of numeracy was inferred from gaining eight credits from mathematics standards. The mix of standards in which students were assessed (e.g., written, spoken, visual, reading aspects of literacy) was not taken into account for this purpose. Nor did the process take into account whether the literacy and numeracy credits came from achievement standards or unit standards. These contested design features, which had been the subject of ongoing critique, were addressed by changes announced in 2011. These changes were being progressively phased in at the time of the 2012 survey.

At NCEA Level 1, students now require 10 Level 1 literacy credits and 10 Level 1 numeracy credits. These come from evidence embedded in their ongoing work—so-called "naturally occurring" evidence. As one option, these credits can be drawn from work submitted for a wide range of achievement standards where the relevant skills are demonstrated by the successful achievement of that standard. Students who gain their literacy and numeracy requirements this way will receive a certificate that says "literacy/numeracy requirement met

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[5] The term 'standards' in this sense cues 'academic rigour': specifically, curriculum content that has been traditionally valued and in which higher achievers might be expected to demonstrate particular strengths.

by Achievement Standards". Alternatively, students can be assessed using newly developed literacy and numeracy unit standards. There are three each for literacy and numeracy, and students must obtain all three to get the requisite 10 credits in literacy and numeracy, respectively. The evidence can be accumulated gradually throughout their course, so this is not as daunting as it may seem initially. Students who gain their literacy or numeracy requirement this way will receive a certificate that says "literacy/numeracy requirement met by Unit Standards".[6]

Fine-tuning University Entrance

A review of the requirements for University Entrance (UE) has seen some fine-tuning as part of the *NZC* alignment process. Subjects whose credits are eligible to count towards UE (the "approved subjects") now include several that were previously excluded, bringing the total number of approved subjects to just over 50.[7] This change was made on the grounds that these subjects have achievement standards at NCEA Level 3 aligned with *NZC* Level 8. However, one trade-off for this modest expansion has been that students now need at least 14 credits in each of three approved subjects, whereas previously they only needed to reach this total in two approved subjects and could spread the remaining 14 credits across "one or two additional domains or approved subjects" (wording on NZQA website). The ability to distribute this third collection of 14 credits more widely afforded more flexibility for schools to create at least some courses that crossed curriculum domains.[8] Such cross-curriculum flexibility could now be harder to achieve, at least at NCEA Level 3.

Ten literacy credits are still needed at NCEA Level 2 or above. Five of these need to be in reading and five in writing. These credits are gained via naturally occurring evidence generated during completion of assessments for NCEA Level 2 or 3 achievement standards in English or te reo Māori. Ten numeracy credits are also needed, but only at NCEA Level 1, and by either of the pathways outlined in the previous paragraph.

The NCEA Level 2 target

> 85% of 18 year olds will have achieved NCEA level 2 or an equivalent qualification in 2017. (New Zealand Government, 2012, p. 2)

This target is one part of the policy package outlined in a short document titled *Delivering Better Public Services: Boosting Skills and Employment by Increasing Educational*

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6 See Hipkins, 2012, for an expanded discussion of the process used.

7 The actual count varies slightly according to whether subjects to be phased out at the end of 2013 are included alongside their replacements, with which they overlap for one year. For example, graphics has been replaced by design and visual communication, while computing has been replaced by digital technologies.

8 An environmental studies course, for example, might include standards from Science and from Social Studies, or one of these subjects with Education for Sustainability.

Achievement for Young People. The policy is based on the argument that gaining NCEA Level 2 is the minimum needed to keep learning pathways open, which in turn has implications for employment prospects, health and overall quality of life in the years beyond school.[9] The target logically precedes and is necessary for the related target that by 2017 55 percent of 25- to 34-year-olds will have a qualification at Level 4 or above. As the next quote from *Delivering Better Public Services* illustrates, achieving the target is expected to be challenging:

> Achieving the target will require a significant improvement in achievement for all learners and particularly for priority groups who are currently underserved by the system. (New Zealand Government, 2012, p. 4)

The table below compares the proportions of students who achieved NCEA Level 2 in the first and every third subsequent year of NCEA, with a gap of two years to the most recently available data at the time this report was written.[10] Across the decade there have been steady gains in success rates for all ethnic groups, although only Asian students are achieving at the target level as yet. The rate of these increases will need to be accelerated if the target is to be met. The table also shows clear differences in the achievement rates of students with differing ethnic backgrounds. Success rates for Māori students will require the strongest boost, followed by those for Pasifika students.

Table 1 **People aged 18 years with a minimum of NCEA Level 2 or an equivalent qualification, 2003–2011**

	2003 %	2006 %	2009 %	2011 %
Asian	71	78	82	86
Pākehā	53	61	72	77
Pasifika	36	43	56	63
Māori	24	31	44	51
Other	45	53	67	75
Total population	48	55	66	72

It should be noted that schools are not the only education providers being challenged to step up. Some 18-year-olds gain their NCEA when enrolled with a tertiary provider. There are implications for building strong pathways for secondary–tertiary transitions, and providers of Youth Guarantee programmes are also being targeted for the delivery of improved achievement rates. Further, the policy document notes that success is built from early childhood onwards, so there are implications for the work done to support students' success

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9 For research evidence that supports this claim, see Wylie & Hodgen, 2011.

10 Data are available at http://www.educationcounts.govt.nz/indicators/data/education-and-learning-outcomes/3664. The 2012 data should become available around September 2013.

well before they arrive at secondary school. Nevertheless, secondary school is where the majority of students will work towards and gain NCEA qualifications, so the NCEA-related views and experiences of those who work there are very pertinent to any considerations of how the target can best be supported.

Methodology of the survey

Four groups are surveyed in each round, with contact and sampling procedures tailored to the practical challenges of reaching a representative number of respondents from each group. In 2012:

- all secondary principals of state and state-integrated schools were surveyed via a posted questionnaire
- all teachers on the PPTA's email database were surveyed via a web-based questionnaire
- the board chair and one other member of each school's board of trustees were surveyed via posted questionnaires sent to the board chair
- a random sample of parents from a representative sub-sample of secondary schools were surveyed with the help of these schools.

The details of the sample actually achieved are outlined in the overview report of the key findings from the 2012 NZCER National Survey (Wylie, 2013). Responses were broadly representative for all four groups. The survey took place during the third school term of 2012.

Because each survey includes a range of questions on different themes, it is possible to look for relationships across these themes; for example, to see whether teachers' views of NCEA are related to their reports of their workload or their views of *NZC*. We used cross-tabulation and factor analysis to explore such relationships.

Because the survey is completed by a large number of respondents, it is also possible to look for patterns in responses related to variables of interest (e.g., school decile). Other teacher variables investigated included: role in school, main teaching subject, gender, number of years of teaching, and overall morale. Other principal variables investigated included: the percentage of Māori students on the school roll, the percentage of Pasifika students on the school roll, roll size of the school, and the principal's overall morale.

The chi-square test was used to identify statistically significant differences related to these characteristics.[11]

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[11] At the $p < 0.05$ level there is a 1-in-20 chance that a difference or relationship as large as that observed could have arisen randomly in random samples. Note that tests of significance do not imply causal relationships, simply statistical association.

Structure of this report

This introductory section provides the context for subsequent sections by outlining evolving changes to NCEA since 2009, when the last NZCER National Survey of Secondary Schools was conducted.

Section 2 discusses various aspects of support for NCEA in 2012. Reporting of school results in media league tables is included in this section because it is associated with levels of teacher and principal support for NCEA. Most individual items included in this section have been used in previous national surveys so it is possible to track changes over time. Some items were included in all four questionnaires, so it is possible to compare the responses of parents, trustees, teachers and principals.

Other questions were asked of only one or two groups for whom they were most relevant. For example, only principals were asked if their school uses the alternative Cambridge or Baccalaureate assessments. Only parents were asked to say how well they thought *they* personally understand NCEA, since this has proved to be an ongoing challenge for public acceptance of the qualification. Parents whose child had experienced NCEA were also asked to respond to a short bank of items about that experience.

Section 3 addresses recent changes to NCEA, focusing on principals and teachers, since they must make these changes work in practice. Trustees' and parents' responses are also included where relevant. This section discusses course endorsement; changes to the way in which the literacy and numeracy parts of an NCEA award are determined; and ongoing work to align NCEA with *NZC*, which was published in its final form in 2007, well after the foundational NCEA achievement standards were developed.

Meeting the specific learning needs of every student in each unique school community sits at the heart of the visionary *NZC* framework (Ministry of Education, 2007). The items discussed in section 4 all relate to the practical working out of that vision within the perceived constraints of established practices in senior secondary schooling. Issues such as the motivation of both high-achieving and under-achieving students are addressed in this section.

Section 5 picks up on indications that relationships between NCEA and *NZC* could be at a critical juncture as far as teachers' curriculum thinking is concerned. Specifically, it reports on teachers' views on whether NCEA constitutes a barrier to curriculum change, and describes the relationships between these views and teachers' responses to other NCEA items.

Section 6 addresses matters related to the moderation of assessment decisions and practices as an aspect of teachers' ongoing professional learning. Reaching a shared understanding of the meaning of standards—to ensure equity in task design/assessment opportunities and in actual assessment decisions—has proven to be demanding and time-consuming. The flip side of this is that moderation can also provide rich opportunities for rethinking curriculum

and the meaning of student learning (Hipkins, 2010a). Best practice workshops provided by NZQA, the government agency responsible for the overall administration of NCEA, are discussed in this section, along with teachers' access to various other opportunities for ongoing professional learning.

Section 7 reports on principal and teacher responses to the recently announced policy target that 85 percent of students should gain at least NCEA Level 2 or equivalent by age 18, by 2017. Reactions, particularly from teachers, can be seen to reflect some tensions and pressure points discussed in the earlier sections of the report. Unless these are proactively addressed, it seems unlikely that the current policy emphasis on raising the overall achievement of NCEA Level 2 will be successfully achieved.

High-stakes assessment has traditionally played the role of sorting students according to their comparative learning success or failure. By contrast, *NZC* places learning success for all students at its heart. The final section of the report argues that directly addressing the relationship between *NZC* and NCEA might provide a productive approach to making further gains in learning success for a wider range of students. The more direct alternative—using NCEA itself as the driver of change—might well prove counterproductive unless accompanied by shifts in teachers' curriculum thinking.

2. Has support for NCEA changed?

Over four cycles of surveys the different groups who participate in the NZCER National Survey of Secondary Schools have been asked to indicate their level of support for NCEA. Figure 1 shows the 2012 responses to the statement *I am supportive of NCEA.* Ninety-five percent of principals, 74 percent of trustees, 69 percent of teachers and 54 percent of parents were supportive of NCEA. Most of those who were not supportive expressed neutral views or uncertainty rather than opposition to NCEA.

Figure 1 **Responses to statement *I am supportive of NCEA***

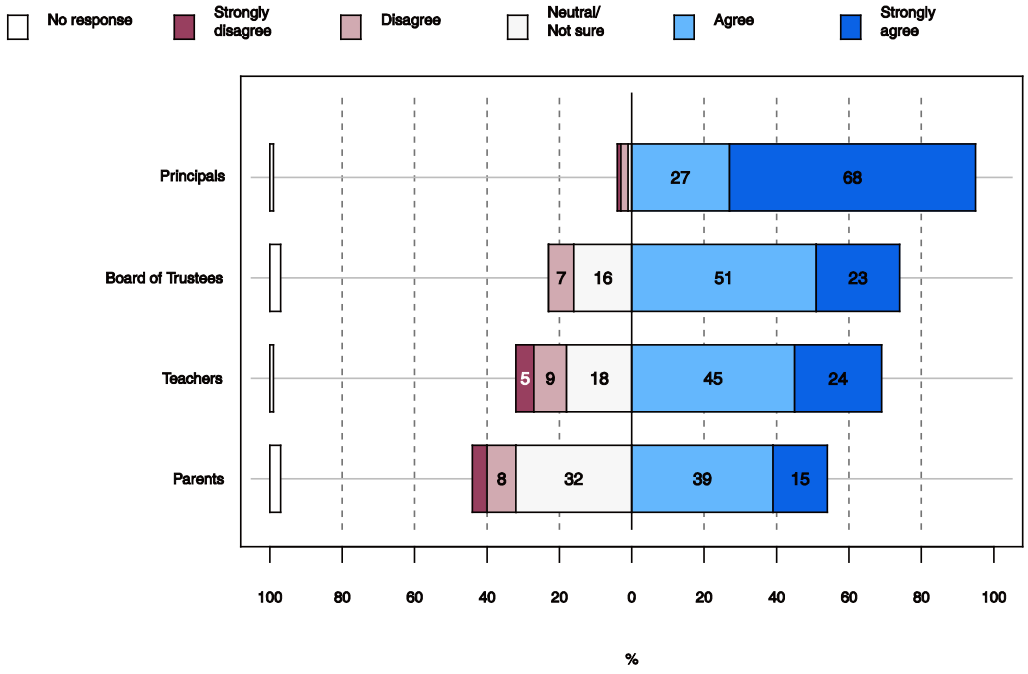


Table 2 tracks trends in support for NCEA, beginning with 2003, when it was still very new. Principals have always been the most positive group and continue to be so. In 2006 there was an *apparent* dip in parental and teacher support.[12] Notice that teacher support had regained the lost ground by 2009 and has remained steady in 2012. Support from trustees has increased a little and parental support has risen above 50 percent for the first time since NCEA was initiated.

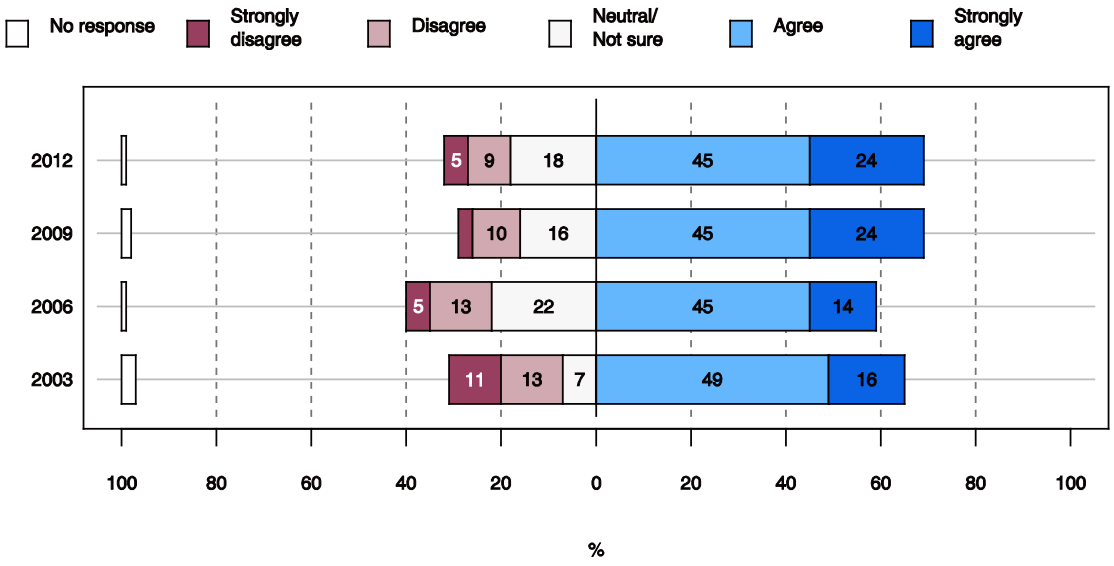
Table 2 **Changes in support for NCEA, 2003–2012**

I am supportive of NCEA (agree/strongly agree)	Principals %	Teachers %	Trustees %	Parents %
2003 responses	87 (n = 95)	65 (n = 744)	Not asked	44 (n = 503)
2006 responses	89 (n = 194)	60 (n = 818)	58 (n = 278)	37 (n = 708)
2009 responses	95 (n = 187)	69 (n = 870)	68 (n = 266)	45 (n = 1,877)
2012 responses	95 (n = 177)	69 (n = 1,266)	74 (n = 290)	54 (n = 1477)

[12] At the time, we suggested that the meaning of this dip should be interpreted with caution because the neutral/not sure category was not available to respondents in 2003. When it was added in 2006, 22 percent of teachers took up this option and this accounted for the dip: the percentage who disagreed or strongly disagreed that they were supportive of NCEA actually dropped slightly (Hipkins, 2007, p. 11).

Aggregated levels of support show the main trends over time, but they can miss some nuances in the overall response pattern of any one group. Illustrating this, Figure 2 shows the full pattern of teachers' responses across the years. The highest levels of polarisation were in 2003, when almost a quarter of the teachers did not support the new qualification. The level of neutrality or uncertainty about NCEA was lower than in 2006, but 2012 levels were much the same as in 2009. Aspects of NCEA policy and practice that contribute to this uncertainty will be discussed in subsequent sections of the report.

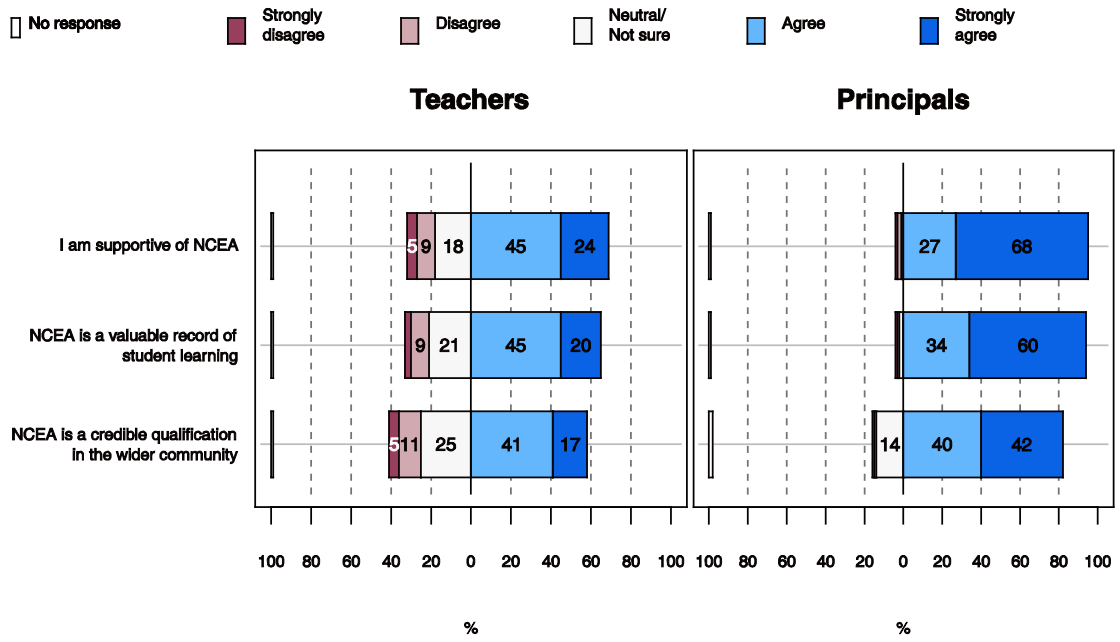
Figure 2 **Patterns in teachers' support for NCEA, 2003–2012**



Perceptions of NCEA as a qualification

The last three rounds of the Secondary National Survey have explored how principals and teachers perceive NCEA's value as a record of learning and how they perceive its credibility in the wider community. The next figure shows the 2012 responses, with the item *I am supportive of NCEA* repeated for the purposes of comparison.

Figure 3 **Principal and teacher responses to statements about NCEA as a qualification**

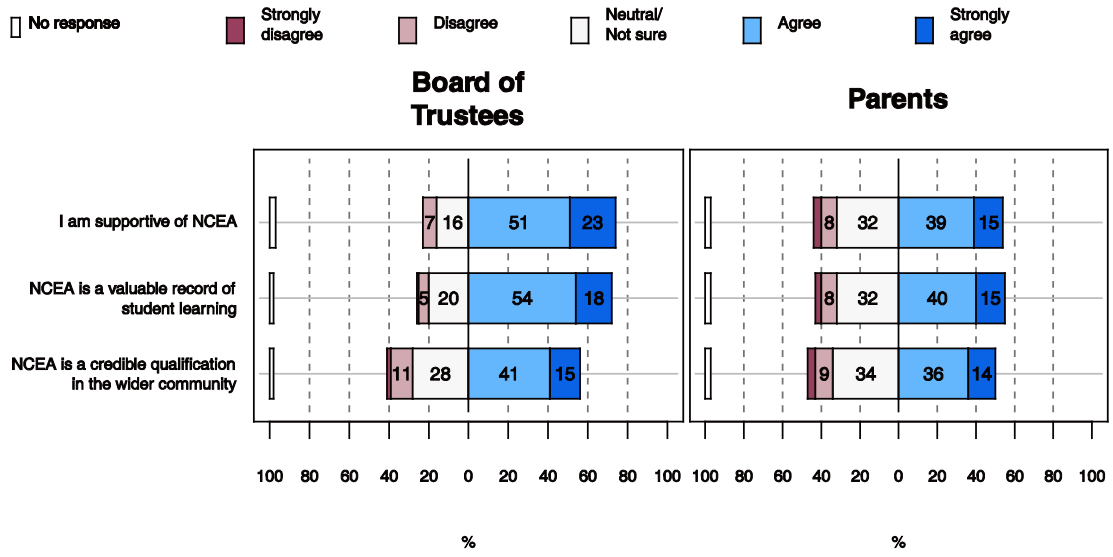


While almost all the principals (95 percent) were supportive of NCEA and thought it constitutes a valuable record of student learning (94 percent), the proportion who agreed that it is perceived as credible in the wider community was lower (82 percent), with most of the difference made up of neutral/not sure responses. This difference could simply reflect some principals' uncertainty about what people think in general.

The same overall pattern shows up in the teachers' responses, but with lower overall levels of agreement (69 percent were personally supportive of NCEA, 65 percent saw NCEA as a valuable record of learning, and 58 percent saw it as credible in the wider community). Notice the higher levels of neutral/not sure responses from teachers for all three of these items. Around a fifth of these teachers were neutral/unsure about NCEA's value as a record of learning, and a quarter about its credibility in the wider community.

We also asked trustees and parents to respond to these two statements. The next figure shows the responses of these two groups. Trustees' views were similar to those of teachers: 72 percent of trustees saw NCEA as a valuable record of learning, and 56 percent saw it as credible in the wider community. Parents were only slightly behind teachers and trustees in thinking that NCEA is credible in the wider community (50 percent). However, they were least likely of the four groups to agree that NCEA is a valuable record of learning (55 percent). Note that around a third of the parents gave neutral/unsure responses to each of these items, and 28 percent of the trustees were unsure if NCEA is a credible qualification in the wider community.

Figure 4 **Trustee and parent responses to statements about NCEA as a qualification**



Changes in responses over time

Table 3 shows trends in views of NCEA's credibility in the wider community. Principal and teacher views that the community see NCEA as a credible qualification increased markedly between 2006 and 2009. During these three years changes made to NCEA included introducing a process for endorsement of achievement standards with merit or excellence passes. This allowed for greater differentiation between levels of achievement and was widely seen as more motivating for students (Hipkins, 2010c). It seems likely that this and the continuing rolling changes outlined in section 1 are reflected in the further increases in the proportions of teachers, trustees and parents who agreed in 2012 that NCEA is seen as a credible qualification in the wider community, with parents' views changing the most.

Table 3 **Perceptions of the credibility of NCEA in the wider community (2006–2012)**

NCEA is a credible qualification (agree/strongly agree)	Principals %	Teachers %	Trustees %	Parents %
2006 responses	47 (n = 194)	27 (n = 818)	41 (n = 278)	30 (n = 708)
2009 responses	81 (n = 187)	47 (n = 870)	47 (n = 266)	36 (n = 1,877)
2012 responses	82 (n = 177)	58 (n = 1,266)	56 (n = 290)	51 (n = 1,477)

Table 4 compares the proportion who thought NCEA represents a valuable record of student learning across the decade. Notice that levels of agreement from principals and trustees

trended in the direction of modest increases in levels of support for this statement, while teacher responses decreased 5 percentage points between 2009 and 2012. There was a proportionally greater increase in support from parents, which again could reflect recent changes to NCEA's processes, such as the endorsement of achievement standards.

Table 4 **Perceptions of the value of NCEA as a record of learning, 2006–2012**

NCEA is a valuable record of student learning (agree/strongly agree)	Principals %	Teachers %	Trustees %	Parents %
2006 responses	82 (n = 194)	45 (n = 818)	53 (n = 278)	38 (n = 708)
2009 responses	88 (n = 187)	70 (n = 870)	65 (n = 266)	42 (n = 1,877)
2012 responses	94 (n = 177)	65 (n = 1,266)	70 (n = 290)	55 (n = 1,477)

Differences in teacher responses

Views of NCEA were linked to teaching subjects. Mathematics, science and computing teachers were over-represented among those who disagreed or strongly disagreed with all three items. By contrast, teachers of social sciences, arts and commerce subjects were over-represented among those who agreed or strongly agreed, and teachers of technology and health/PE, and transition, careers and special education teachers, were more likely to be unsure.

There were also differences related to teachers' roles. Deputy and associate principals were over-represented in those who *strongly* agreed with all three items. Their responses were noticeably closer to responses from principals for all the NCEA items in the survey. Another pattern that will be repeated in coming sections was that specialist classroom teachers were over-represented among those who gave a neutral/unsure response. There is possibly a confounding influence of subject specialisation here: 44 percent of the specialist classroom teachers in the sample were also technology teachers.

Male teachers were more likely than female teachers to disagree or strongly disagree with all three statements. Positive responses are likely to be somewhat confounded with responses by subject area, because 60 percent of the responding social science teachers and 73 percent of arts teachers were female. However, there was a much closer gender balance for both mathematics and sciences, suggesting that gender differences were not likely to be confounded with the over-representation of negative responses for this group of subjects.

There was a very clear pattern of differences associated with self-reported overall morale levels. The higher a teacher's morale, the more likely they were to strongly agree with all three statements about NCEA. Those in the lowest morale groups (poor/very poor) were more likely to disagree, or strongly disagree, with all three statements. There were no clear

indications that levels of morale were associated with subjects taught, or gender, suggesting that these factors were less related to morale levels than were views of NCEA.

Teachers in decile 1 or 2 schools were more likely to agree that NCEA provides a valuable record of student learning, while those in decile 9 or 10 schools were more likely to be unsure.

Differences in parent responses

Parents whose children were enrolled in decile 1 or 2 schools were more likely than other parents to *strongly* agree that they were supportive of NCEA and were less likely to give a neutral/unsure response to this item. The same pattern held for NCEA as a valuable record of student learning and for perceptions of its credibility in the wider community.

Relationship between parental support and understanding

In a new item in 2012, parents were asked to respond to the statement *I understand how NCEA works in general*. Two-thirds (62 percent) agreed or strongly agreed that this was the case. Almost a quarter were unsure (23 percent) and 13 percent disagreed. By contrast with the patterns reported above, there was no decile-related difference in parents' perceptions that they personally understood how NCEA works in general.

Perhaps predictably, parents who agreed or strongly agreed that they understood how NCEA works in general were also more likely to agree or strongly agree that they were supportive of NCEA, and saw it as a valuable record of student learning and as a credible qualification in the wider community. Those who disagreed with these three statements were also more likely to disagree that they understood how NCEA works, and those who were unsure about how NCEA works were also more likely to be unsure about their support for it.

There is some evidence that increased understanding of NCEA comes with experience of what happens once students are in their senior secondary years. Parents whose youngest child was in Years 11–13 were more likely to agree or strongly agree that they understand how NCEA works in general. While a clear majority of this group were supportive of NCEA, around 13 percent of parents with children in the senior secondary school disagreed or strongly disagreed that they were supportive of NCEA, and did not see it as a valuable record of student learning and as a credible qualification in the wider community. For this group, experience of NCEA (assuming their child was not being assessed for a different qualification) had not led to their support for the qualification.

An NCEA credibility factor

The three items shown in Figure 3, along with one other item (*NCEA motivates high-achieving students to do their best*) formed principal and teacher factors we called *NCEA credibility.* The extent of the internal consistency with which individuals answer the items that make up a factor is measured as an alpha (α) value. The principal α value was 0.84 and the teacher α value was 0.89. These high alpha values suggest that both teachers and principals responded in an internally consistent manner to these items.

NCEA results and their impact

Impact of league tables

We asked principals and trustees how media-generated league tables of NCEA results had affected their school roll. League tables can create winners and losers. While 26 percent of the principals thought that NCEA league tables had a positive impact on their school roll, 31 percent thought they had a negative impact. Thus over half the principals reported some impact of league tables on their school roll. Fewer trustees agreed there had been an impact either way (19 percent agreed there had been a positive impact and 17 percent agreed there had been a negative impact).

Principals of schools with more than 30 percent Māori students on the roll and principals of decile 1 or 2 schools were more likely to strongly agree with the statement that NCEA league tables have a negative impact on their roll numbers. These two variables are doubtless confounded, given that low-decile schools tend to enrol higher proportions of Māori and Pasifika students.

Trustees in decile 1 or 2 schools were more likely to be unsure if league tables had affected the school roll either positively or negatively. (Close to two-thirds of them were unsure in either case). By contrast, trustees in decile 9 or 10 schools were more likely to agree or strongly agree that NCEA results had positively affected the school roll, and to disagree or strongly disagree that NCEA had negatively affected the school roll. Around a third were unsure in either case—a much lower proportion than in the decile 1 or two schools.

Overall responses of trustees serving in mid-decile schools were between these two extremes, but somewhat closer to the responses of the trustees in the lower-decile schools (for example, around half were unsure if NCEA had affected their school either positively or negatively.) It would seem that trustees in high-decile schools are more likely to be aware of the potential for NCEA results to have an impact on the school roll.

Pressure on teachers to boost student results

While lifting the achievement of students is (or should be) an important professional concern for all teachers, the use of the word 'boost' in the item discussed next, combined with an implication of something unfair, arguably orients interpretation away from legitimate learning gains and towards pressure-induced inflation or 'fudging'.

Just over half the teachers (53 percent) agreed or strongly agreed that *I feel under unfair pressure to boost my students' NCEA results*. A quarter disagreed or strongly disagreed, with the remaining quarter unsure or neutral. This item was included in the survey for the first time in 2012, so no trends over time can be reported.

We found some patterns of differences in these responses associated with teacher characteristics, as follows.

- Teachers who strongly agreed they felt under unfair pressure to boost NCEA results were also more likely to characterise their morale as poor or very poor.
- Teachers in the first two years of their careers were under-represented in the group who strongly agreed they felt under unfair pressure. These teachers were more likely to be unsure. By contrast, the longest-serving teachers (11 years plus) were more likely than all other teachers to disagree that they were under unfair pressure. This combination suggests that experience plays a part in helping teachers chart their own course without feeling pressured, but also that early career teachers are being supported when it comes to NCEA work.
- Associate and deputy principals were more likely to disagree, while faculty leaders and other holders of management units were more likely to *strongly* agree that they felt under unfair pressure to boost NCEA results.
- Teachers in the social sciences/arts/commerce cluster of subjects were somewhat more likely than teachers of other subjects to agree they felt under pressure to boost NCEA results. This is particularly interesting given the somewhat higher levels of overall support for NCEA among this group of teachers. The difference could be accounted for by the somewhat higher proportion of faculty leaders in this subject (42 percent of all respondents in this cluster, compared with an overall average of 34 percent of faculty leaders).
- There was no clear association with school decile or teacher gender.

Other associations between feeling under pressure and overall support for NCEA

Teachers who strongly agreed they were supportive of NCEA were also more likely than other teachers to strongly disagree that they felt under unfair pressure to boost NCEA results. The opposite pattern also held: teachers who strongly agreed that they felt under

unfair pressure to boost results were over-represented among those who disagreed or strongly disagreed that they were supportive of NCEA.

This same pattern held for perceptions that NCEA is a valuable record of student learning and that it is a credible qualification in the wider community. In fact, the following sections will show that this pattern holds for many of the NCEA-related items in the survey.

Clearly, feeling pressured over the NCEA achievement rates of one's students might be counter-productive in terms of the negativity it generates towards NCEA as a whole. However, this relationship is neither straightforward nor (necessarily) causal, given the indications above that morale, years of experience and subjects taught are also related. Also, the relationship could well flow the other way: not being supportive of NCEA in the first place might well lead to feelings of pressure to boost results. This dynamic might play out, for example, if a teacher holds a strong gatekeeper view of assessment, and believes that it is not sufficiently rigorous unless designed to deliberately exclude a certain percentage of students from gaining the qualification. Section 7 discusses this issue.

Alternatives to NCEA

NCEA is the national qualification, but schools can offer other qualifications if they want. None of the principals who responded in 2012 said they used the International Baccalaureate qualification in their school. Nine percent said they used Cambridge examinations and a further 3 percent were considering doing so. This is a modest increase on 2009, when 7 percent of principals said the school already offered Cambridge examinations and a further 1 percent were considering doing so (Hipkins, 2010c, p. 11).

Concluding comments: support for NCEA one decade on

The 2012 survey provided the fourth opportunity (2003, 2006, 2009 and now 2012) for all groups who respond to the NZCER National Survey of Secondary Schools to indicate their personal support for NCEA, and the third opportunity to comment on NCEA's credibility and value as a record of learning. Responses to these items provide a useful barometer of acceptance of NCEA as various adjustments have been implemented during the decade (see section 1). Over these years support for NCEA has consolidated among principals, who were the most supportive group from the time of the qualification's inception, and has gradually increased among trustees, teachers and parents. This trend will no doubt please many of the education professionals who have variously contributed to making NCEA more workable for schools and more credible to the wider public.

Has this success come at some cost to NCEA's original intent? NCEA was designed to recognise and credential the learning success of *all* students, whatever their traditional academic prowess. By comparison, the previous system was primarily designed to *sort* students on the basis of their comparative academic performances (see Gilbert, 2005, for a discussion of this shift in priorities and why it matters). Thus NCEA challenges traditional assumptions about who deserves to succeed. In view of this, it is noteworthy that the items discussed in this section form a factor called *NCEA credibility*, which also includes an item related to the motivation of higher-achieving students but not a similar item about those who are lower achieving.

Rolling changes to NCEA, as discussed in more detail in the next section, have arguably made the qualification appear more similar to the previous examination-based system and hence presumably more familiar to the wider public. Now that support for the qualification has stabilised, and in view of new policy imperatives to lift overall achievement levels (see section 7), the next challenge could be to promote wider understanding of the original intent of NCEA. The time could be right to renew efforts to promote wider acceptance of NCEA's underpinning approach to learning and assessment, especially as this foundational intent aligns so strongly with key messages in *NZC* about designing a local curriculum that supports *every* student to enjoy learning success, whatever their starting point (Ministry of Education, 2007).

This section also provides early indications of a relationship between teacher support for NCEA and a range of contextual factors, including school decile, teachers' areas of subject expertise, their role in the school and their overall morale. The existence of such relationships is a recurring theme in the report.

For parents, support for NCEA is likely to be linked to direct involvement of their child in the assessment system. This does not seem particularly surprising, but it does suggest a continuing need for better communications with parents *before* their children reach their NCEA years if a greater proportion of the wider public is to come to a better understanding of the qualification, and why high-stakes assessment has changed in the ways that it has.

Ideally, the twin communication challenges of developing wider public understanding of NCEA and explaining the 21st century curriculum thinking signalled by *NZC* could be merged into one co-ordinated effort. In the absence of systematic efforts to communicate the coherence that can (or at least could) be leveraged between these two aspects of policy, there is a real risk that ongoing tweaks to NCEA will continue to move it back in more familiar 20th century curriculum directions. Support for these ongoing changes is discussed in the next section.

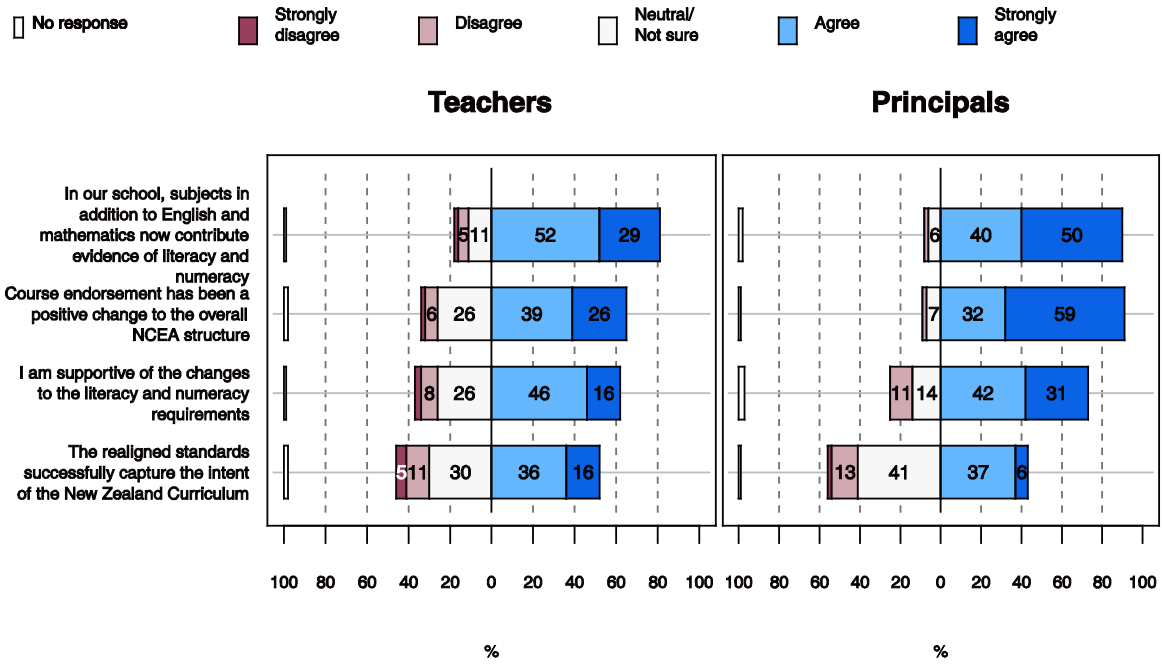
3. Recent changes to NCEA

As outlined in section 1, there were ongoing changes to NCEA policies and processes between 2009 and 2012. In response, we shaped four new items to gauge the extent of teacher and principal support for the main changes, with trustees also responding to the item about course endorsement and parents responding to modified versions of two of the items.[13] Figure 5 shows the principal and teacher results.

Most principals and around three-quarters of the teachers agreed that subjects in addition to English and mathematics now contribute evidence of literacy and numeracy in their school. Fewer in either group, but still a clear majority, were personally supportive of the changes to literacy and numeracy requirements *per se*. The majority agreed that course endorsement had been a positive change, again with agreement from a higher proportion of principals than teachers. Of these four items, there was least agreement that the realigned NCEA standards successfully capture the intent of the curriculum (*NZC*). It is not that this item showed large increases in levels of disagreement (these were low for all four items). Rather, 30 percent of teachers and 41 percent of principals gave neutral/not sure responses. All these findings are elaborated in the sub-sections that follow.

[13] The intent of the modifications was to allow parents to answer from the perspective of their own and their child's experience of NCEA, whereas principals and teachers responded on a more general basis.

Figure 5 **Teacher and principal support for recent changes to NCEA**



Course endorsement

How did principals, teachers and trustees feel about course endorsement? As Figure 5 shows, most principals (91 percent) and almost two-thirds of teachers (65 percent) saw this as a positive change. Trustees were also asked to respond to this item. Just over half (55 percent) also agreed or strongly agreed that this has been a positive change. However, over a third of the trustees (37 percent) and a quarter of the teachers (26 percent) were unsure.

For the teachers, this response is somewhat muted compared to the 2009 response to certificate endorsement when individual achievement standards are gained with merit or excellence. Most teachers (86 percent) then saw certificate endorsement for individual standards as a positive change and just 8 percent were unsure. We cannot know if some teachers have had second thoughts about endorsement of individual standards because we did not repeat the relevant item.

The support from trustees is also a lot more muted than in 2009, when most (90 percent) saw the endorsement of individual standards as a positive change and just 7 percent were unsure. It may be that individual course components (assessed by separate specific standards) are a more familiar concept to many trustees than different *types* of courses that can now exist as varying combinations of those standards. This is one possible way to account for the marked increase in levels of uncertainty or neutral response from this group.

Another reason not to support this change might relate to the potential of course endorsement to create a sharper divide between 'academic' and other subjects, given that most unit standards can only be awarded at achieve level and hence cannot generate any contribution towards course endorsement. This could create a perverse incentive that discourages teachers from making more use of unit standards when designing courses that more flexibly meet students' learning needs. This possibility was checked by cross-tabulating teachers' views on whether NCEA motivates low/high achievers[14] and their views on course endorsement (see section 4). Around three-quarters of those who disagreed/strongly disagreed that NCEA motivates low achievers (i.e., around a third of all respondents) also disagreed/strongly disagreed that course endorsement is a positive change. Around two-thirds of those who disagreed that NCEA motivates high achievers (around a fifth of all respondents) also disagreed that course endorsement is a positive change. These relationships mean we cannot rule out a general negativity towards NCEA being behind some disagreement that course endorsement is a positive change.

Using a range of approaches to demonstrate literacy and numeracy

As Figure 5 shows, 73 percent of principals and 62 percent of teachers supported the changes to the processes used to determine the literacy and numeracy components of an NCEA award, although a quarter of the teachers (26 percent) and 14 percent of principals were unsure or neutral.

Clearly the intended changes have been widely implemented. Most principals (90 percent) and teachers (81 percent) agreed or strongly agreed that subjects other than English and mathematics now contribute evidence of literacy and numeracy. The 11 percent of teachers who were unsure are likely to include some who did not have direct involvement in making these judgements: for example, they might not teach senior classes.

Alignment of NCEA and *NZC*

Figure 5 shows the extent to which principals and teachers perceived that the alignment process has successfully captured the intent of *NZC*. Principals responded in general terms, but teachers responded specifically for their main teaching subject. As might be expected, given that they are likely to have little direct involvement in teaching, almost as many principals were unsure (41 percent) as agreed or strongly agreed that alignment has captured

[14] There was a very clear relationship between teachers' views about the motivation of either group: those who strongly agreed NCEA motivates high achievers were also more likely to strongly agree it motivates low achievers.

the intent of *NZC*. Note, however, that only just over half the teachers (52 percent) perceived that the realigned standards had successfully captured the *NZC* intent for their subject.

Patterns of differences in responses

Teacher responses

There were some clear differences associated with the type of subject taught. Teachers of social sciences, arts and commerce subjects were more likely than all other teachers to *strongly* agree that the alignment of achievement standards in their subjects reflects the intent of *NZC*. They were also more likely than teachers of other subjects to strongly agree that they support course endorsement and the changes to documenting literacy and numeracy. Teachers of English/languages and mathematics, science and computing subjects were more likely than teachers of other subjects to *disagree* that they support the changes to literacy and numeracy requirements. Teachers of mathematics, science and computing were also more likely than all other teachers to disagree or strongly disagree that alignment in their subject is reflected in the intent of *NZC*.

Continuing the pattern reported in section 2, deputy and associate principals were more likely to strongly agree and specialist classroom teachers to be neutral/unsure about whether course endorsement is a positive change, or if subjects other than English and mathematics now contribute to the determination of literacy and numeracy. Faculty leaders were over-represented among those who *strongly* agree that the realigned standards reflect *NZC*'s intent for their subject area. Specialist classroom teachers were again more likely to be unsure if this is the case. Given that so many of the specialist classroom teachers are technology teachers, these non-committal responses might be reflections of the contested nature of changes to the technology curriculum and associated changes to its NCEA standards. It could be that the jury is still out for some of them.[15]

Female teachers were more likely to agree, and male teachers to be unsure or disagree, that they support course endorsement. The same pattern held for changes to literacy and numeracy. Female teachers were more likely to strongly agree, and male teachers to disagree or strongly disagree, that alignment in their subject reflects the intent of *NZC*. However, as already noted in section 2, the gender imbalance in the social sciences, arts, commerce

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[15] Technology teachers are grouped with teachers of other subjects with a strong practical component for the purposes of analysing associations with subjects taught. This is necessary to achieve groups of sufficient size for meaningful analysis, but a possible cost is that differences between teachers *within* the group are masked. The next section will similarly point to some differences between mathematics and science teachers, who are grouped for subject teacher analysis purposes. These differences show up because mathematics teachers are over-represented in the role of holders of management units.

subject cluster suggests that gender and subject variables are likely to be confounded in the case of 'strongly agree' responses.

As was the case for the statements discussed in section 2, there was a clear association between levels of morale and levels of support for course endorsement and literacy and numeracy changes: the higher the morale, the more likely the change was strongly supported. The lower the morale, the more likely the change was not supported or the teacher was unsure. A similar pattern held for the statement that other subjects in the school contribute evidence of literacy and numeracy, although the differences were not quite as distinct for this item because fewer teachers overall disagreed that this practice took place in their school. Again there was a very clear pattern of association between levels of morale and agreement that the alignment reflects the intent of *NZC*. Teachers with very good morale were more likely to strongly agree, those with good morale to agree, those with satisfactory morale to be unsure, and those with poor or very poor morale to disagree or strongly disagree with this statement.

Compared with all other teachers, those in decile 1 or 2 schools were less likely to strongly agree, and more likely to be unsure, that course endorsement constitutes a positive change to the overall NCEA structure.

No differences related to years of teaching experience were found.

Principal responses

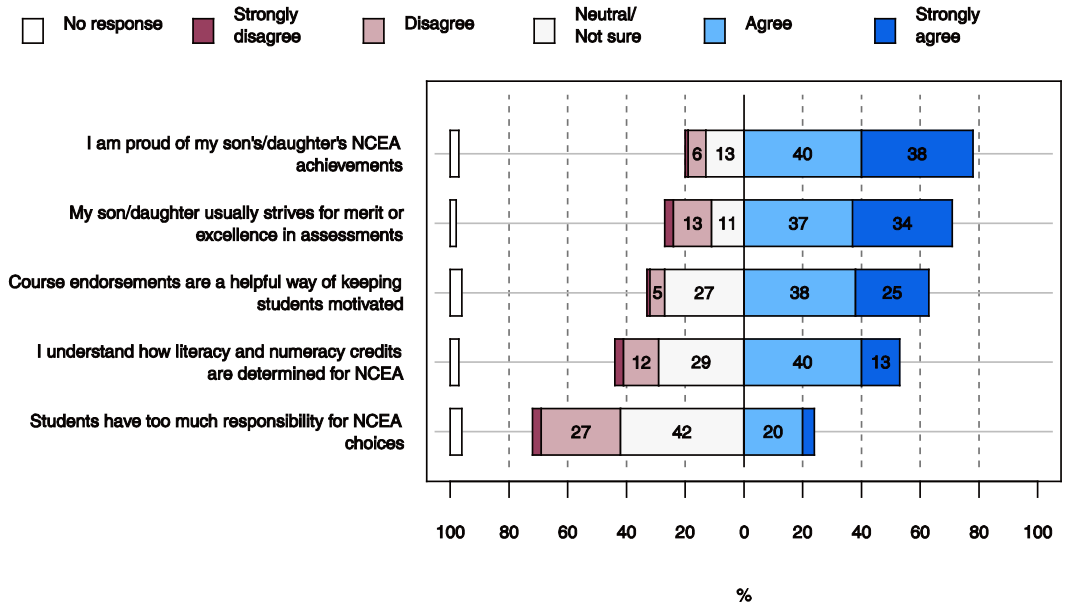
Principals from decile 1 or 2 schools showed the lowest levels of overall agreement that the realigned standards successfully capture the intent of *NZC*. Principals from decile 9 or 10 schools were more likely than other principals to agree with this statement.

Principals with very good morale were more likely to strongly agree that they are supportive of the changes to literacy and numeracy requirements.

Parents' experiences in relation to recent changes

If parents had a child in Year 11, 12 or 13 in 2011 or 2012, they were asked to respond to several items that looked at recent changes from a family perspective (n = 964). As Figure 6 shows, NCEA achievements are a source of pride for most parents with a son or daughter in the senior secondary school, and the majority of these parents also agreed that their own child usually strives to achieve with merit or excellence. However, 27 percent were unsure if course endorsements keep students motivated, 29 percent were unsure that they knew how literacy and numeracy credits are achieved, and 42 percent were unsure if students have too much responsibility for their NCEA choices. Note that this final item in the set is a reversed item (disagreement is a supportive response).

Figure 6 **Parents' views of NCEA in relation to their own child's experiences**



Note: n = 964.

A further communications challenge is implied by the comparatively high levels of uncertain responses for several of these items. As well as getting to grips with the basic structure and intent of NCEA, parents need support to understand changes in processes (such as the determination of literacy and numeracy) if they are to be in a position to better support their children to make good choices through their senior secondary years.[16]

Differences in parental responses

Compared to other parents with a son or daughter involved in NCEA assessments, those whose child attended a decile 9 or 10 school were more likely to strongly agree that their child strove for merit or excellence, and those whose child attended a decile 1 or 2 school were more likely to be unsure if their child did this.

[16] This issue has also arisen in the research of the Starpath team at Auckland University, who proactively addressed it by writing a book for parents and students (Madjar & Mckinley, 2011). However, this pre-dates the most recent changes in NCEA processes.

Concluding comments: a mixed response to ongoing changes to NCEA

Parents' responses in this section highlight a continuing challenge for NCEA's ongoing development and public acceptance. In the absence of any nationally orchestrated communications strategies (either at NCEA's inception or since), helping parents to figure out how it all works has tended to be left to schools, or to parents' own direct experience once their children reach their NCEA years. More complex changes, such as those involved in aligning *NZC* and NCEA, or the changes to processes for awarding literacy and numeracy, are likely to pass parents by unless they have opportunities for explicit conversations about these.

However, as section 6 will show, many teachers are still building their professional confidence to have the relevant types of assessment/learning conversations with their students, and so to do so with these students' parents as well might seem a bridge too far. In any case, this section suggests that some teachers' own thinking about the most recent changes could still be in a state of flux.

The comparatively high levels of teacher uncertainty and disagreement that the alignment reflects *NZC*'s intent for their subject are hard to interpret definitively. There are several reasons why teachers could variously have been unsure or disagreed.

- Teachers feel they don't fully understand the new standards as yet. The Level 2 externally assessed achievement standards, for example, were used for the first time later in 2012 and hence were still something of an unknown quantity when the survey was undertaken. The Level 3 standards were still being prepared for first use on 2013.
- Teachers are still getting to grips with *NZC* itself.[17]
- Teachers perceive that the newly aligned standards do not adequately reflect *NZC*'s aim of developing a future-focused curriculum for the 21st century.
- Or, directly contrary to this, they might see the new standards as a watering down of the traditional content of the previous curriculum (i.e., as not traditional enough).

It is not possible to ascertain from these data which of these possibilities prompted individual teachers' responses: some no doubt were influenced by a combination of at least two of these possible influences. The next section of the report elaborates further on this issue.

Compared with high levels of positive support in 2009 for certificate endorsement when individual achievement standards are awarded with merit or excellence, support from both teachers and trustees for *course* endorsement was somewhat more muted in 2012, although

[17] Implementation research has identified a need for recursive exploration of *NZC*'s intent over several cycles of change, which obviously takes considerable time. See, for example, Hipkins & Boyd, 2011.

still positive overall. The further analysis reported above suggests this more muted response might reflect a combination of several influences. NCEA was intended to create parity of esteem for all students' substantive achievement gains, and course endorsement might be seen as undermining that intent because unit standards cannot be endorsed, and so neither can courses largely assessed using these. The clear message in *NZC* is that students' actual learning needs should be located at the heart of teaching and learning decisions and actions. The next section investigates this aspect of NCEA's interaction with *NZC*.

4. Putting students at the centre of learning

> The *New Zealand Curriculum*, together with the Qualifications Framework, gives schools the flexibility to design and deliver programmes that will engage all students and offer them appropriate learning pathways. The flexibility of the qualifications system also allows schools to keep assessment to levels that are manageable and reasonable for both students and teachers. Not all aspects of the curriculum need to be formally assessed, and excessive high-stakes assessment in years 11–13 is to be avoided. (Ministry of Education, 2007, p. 41)

As this direct quote from *NZC* makes clear, there is an expectation that secondary schools will use the flexibility offered by the combination of *NZC* and the Qualifications Framework to design courses that appropriately meet the needs of all their learners. Do principals and teachers believe it is possible and practicable to work towards this important equity goal? This section reports on their responses to a range of items pertinent to this intention, which sits at the heart of *NZC*.

The NCEA items discussed in this section are shown in Figure 7 (below). The responses are ranked from highest to lowest teacher agreement. Highest levels of overall teacher agreement were for the two items not included in the principal survey: 88 percent of teachers were in faculty teams that had redesigned senior courses in the last two years, and 74 percent of them agreed that a range of assessment methods can be valid for NCEA. Note that the bottom-ranked item is negatively worded (*Students have too much responsibility for NCEA choices*), so disagreement is actually a positive response.

Again, as in earlier sections of the report, a considerably higher proportion of principals than teachers agreed with the common items, although the ranking order was almost identical for

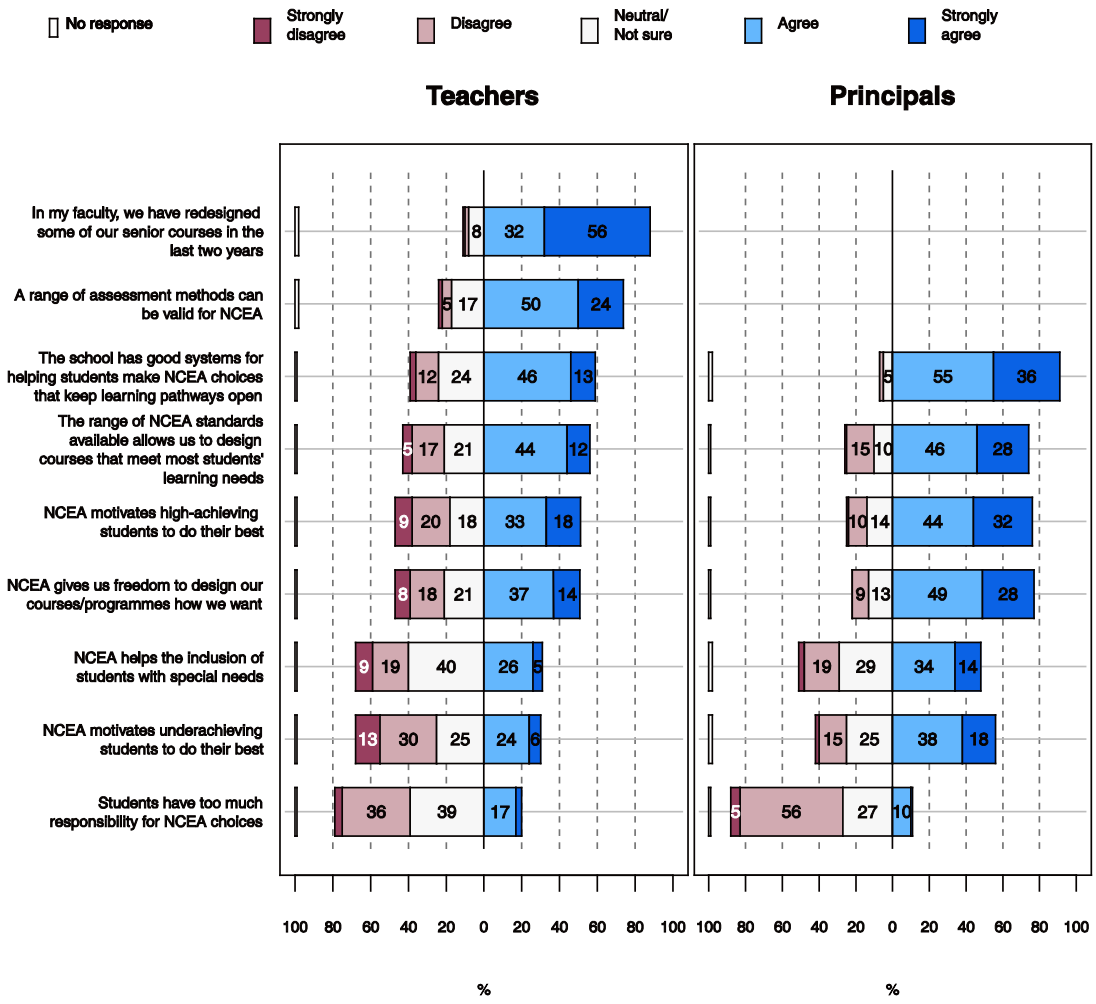
both groups. Around three-quarters of the principals and half the teachers agreed that the school could design courses to meet students' needs, that NCEA gives them this freedom, and that they have good systems for tracking the course choices that students make, so that they keep learning pathways open. The lowest levels of agreement were for items concerning NCEA's ability to motivate lower-achieving students to do their best, or to help with the inclusion of students with special learning needs. The latter elicited the highest levels of neutral/unsure responses from both principals and teachers.

Designing new courses

It would seem that course design has been a very active focus for professional attention since the last National Survey of Secondary Schools. Most teachers (88 percent) worked in faculties where some senior courses had been redesigned in the last two years. This was the highest-ranking item of those in Figure 7. Responses to an open question elsewhere in the survey suggest that the 8 percent who were unsure are likely to only teach junior secondary classes, or to be relievers who work across different schools. This is also likely to be at least a partial explanation for uncertainty in other items discussed in this section.

Planning of appropriate assessment tasks is an important component of overall course design. Three-quarters of the teachers (74 percent) agreed or strongly agreed that a range of assessment methods can be valid for NCEA. This response is much the same as in the 2009 survey, when 71 percent of teachers agreed or strongly agreed with this statement (Hipkins, 2010b). This is the second-highest ranking item in Figure 7. This response does not tell us whether this possibility for variety was actually taken up in the assessments designed.

Figure 7 **Teacher and principal responses to items about NCEA's ability to help meet students' learning needs**



Meeting specific learning needs: principal and teacher views

The amount of flexibility that NCEA actually affords when considering a range of learning needs is important. If teachers perceive they do not have the freedom to be fully responsive to their specific students' needs, they may feel they cannot design courses that meet these needs, no matter what *NZC* might have to say. Thus a necessary (but not necessarily sufficient) condition for using NCEA's potential flexibility to meet students' learning needs is

the belief that NCEA does afford curriculum freedom. Notice that only half the teachers (51 percent) agreed or strongly agreed that NCEA does allow this freedom to design courses how they want, whereas three-quarters of principals (77 percent) thought NCEA afforded this freedom. There is a large gap between principals' and teachers' perceptions here.

One possible reason for feeling constrained when designing courses to meet specific learning needs is that the range of NCEA standards available is not seen to encompass the course outcomes teachers would like to be able to assess. As Figure 7 shows, just 56 percent of teachers agreed or strongly agreed that *The range of NCEA standards available allows us to design courses that meet most students' learning needs*. By contrast, almost three-quarters of the principals (74 percent) agreed or strongly agreed with this statement.

Our 2009 report on NCEA noted the withdrawal of a number of curriculum-related unit standards, which could be seen by some teachers as narrowing the range and flexibility of assessment and course design options. By 2012 the alignment project had worked to ensure that any remaining curriculum-related unit standards for Level 1 NCEA were set at *NZC* Level 6 (some had previously been at *NZC* Levels 5 or 4).

This ostensible raising of the assessment bar would likely show up as higher levels of doubt about whether NCEA can be motivating for lower-achieving students compared to higher-achieving students, since their achievement is more likely to be assessed using unit standards. As Figure 7 shows, that is indeed the case. Half the teachers (51 percent) thought that NCEA motivates high-achieving students to do their best, but only 30 percent thought it motivates underachieving students to do their best. Principals' views show a similar pattern, albeit with higher levels of agreement overall: three-quarters of the principals (76 percent) thought that NCEA motivates high-achieving students to do their best but only 56 percent thought it motivates underachieving students to do their best.

Notice, too, that just 31 percent of teachers and 48 percent of principals agreed or strongly agreed that NCEA helps with the inclusion of students with special learning needs. However, many principals and teachers were uncertain if this is the case, perhaps because they have not been personally involved in designing programmes of learning for such students.

Meeting specific learning needs: trustees' views

Trustees were asked to respond to a differently worded generic item that did not differentiate specific types of needs (e.g., high and lower achieving). Their item said *Recent changes to NCEA have made it easier to meet the learning needs of diverse groups of students.* Although 29 percent agreed or strongly agreed, many more (59 percent) were unsure if this is the case.

Systems for tracking learning progress/pathways

One potential downside of freedom and flexibility in designing courses assessed by NCEA credits is that students might "fall through the cracks" if they choose inappropriate courses and/or selectively opt out of assessments for standards needed to progress to the next learning level of any desired pathway. As Figure 7 shows, most principals (91 percent) but only 59 percent of teachers agreed or strongly agreed that the school has good systems for helping students make NCEA choices that keep learning pathways open. Many trustees (80 percent) also agreed or strongly agreed with this statement and just 14 percent were unsure.

Very few principals (11 percent) or trustees (8 percent), and only somewhat more parents (16 percent) or teachers (20 percent), agreed or strongly agreed that NCEA gives students too much responsibility for the NCEA choices they make. The next table shows declining levels of agreement among principals and trustees over time that students have too much of this responsibility, relatively unchanged views among parents, and greater variation in teacher responses.

Table 5 **Students have too much responsibility in managing NCEA assessment choices, 2006–2012**

Students have too much responsibility for their NCEA choices (agree/strongly agree)	Principals %	Teachers %	Trustees %	Parents %
2006 responses	16 (n = 194)	28 (n = 818)	26 (n = 278)	14 (n = 708)
2009 responses	12 (n = 187)	16 (n = 870)	14 (n = 266)	16 (n = 1877)
2012 responses	11 (n = 177)	20 (n = 1,266)	8 (n = 290)	16 (n = 1,477)

Differences in patterns of responses

The item about redesigning senior courses in the last 2 years was the only one in Figure 7 that did not show a clear association with teacher morale. Teachers with very good morale were more likely to *strongly* agree with the statements in Figure 7 and teachers with poor or very poor levels of morale were more likely to disagree or strongly disagree. The pattern was reversed for the negatively worded statement *Students have too much responsibility for their NCEA choices*: teachers with lower morale were more likely to agree and those with very good or good morale to disagree.

As might be anticipated, teachers' roles appeared to have an effect on their views of these aspects of NCEA. Faculty heads and holders of management units were more likely to *strongly* agree that they have redesigned senior courses in the last 2 years, doubtless because they led these changes. Together with senior leaders, they were also more likely to strongly agree that a range of assessment methods can be valid for NCEA. Senior leaders were more likely to *strongly* agree that the range of NCEA standards allows the school to design courses

that meet most students' learning needs, and that NCEA gives the school freedom to design courses/programmes how they want. Their role affords the opportunity to look across the different learning areas, so they are in the best position to identify instances of innovation in course design, especially compared to those teachers who might only respond from their experiences in only one faculty of the school. Senior leaders were also more likely than all other teachers to *strongly* agree that NCEA motivates both high and lower achievers to do their best.

Senior leaders, together with the deans, were more likely to agree or strongly agree that the school has good systems for helping students make choices that keep learning pathways open. No doubt their specific roles ensure they are aware of these systems, but it seems that this awareness may not be widely shared among other staff. More than a quarter of faculty heads and almost a third of the classroom teachers said they were not sure if this is the case.

There were a number of differences associated with teachers' subject specialisations. Because these patterns vary for the different items, they are reported by the subject clusters used to group responses.

- Mathematics, science and computing teachers were more likely to disagree or strongly disagree that NCEA gives them the freedom to design courses/programmes "how we want", or that NCEA helps with the inclusion of special needs students or motivates underachieving students to do their best.
- Teachers of social sciences, arts and commerce were more likely to strongly agree that NCEA gives them the freedom to design courses/progammes "how we want", that a range of assessments can be valid for NCEA, and that they can access a range of standards that allows them to design courses that meet most of their students' learning needs.
- Teachers of technology, PE, health, transition, careers and special education were more likely to strongly agree that NCEA gives them the freedom to design courses/programmes "how we want". However, along with mathematics and science teachers, they were more likely to disagree that NCEA motivates underachievers to do their best.
- Teachers of English and languages were somewhat more likely than other teachers to agree that NCEA helps with the inclusion of special needs students.

Teachers in the first 2 years in the role were more likely than all other teachers to be unsure whether senior courses had been recently redesigned. This pattern possibly reflects a lack of knowledge for some beginning teachers of planning activity that preceded their arrival in the faculty. Teachers with more than 15 years' experience were more likely to agree or strongly agree that NCEA motivates underachievers to do their best.

Males were more likely than females to disagree or strongly disagree that NCEA motivates high achievers to do their best, or that they can access a range of standards to meet most students' learning needs.

Teachers in decile 1 or 2 schools were more likely to agree that NCEA motivates underachieving students to do their best, and that NCEA gives them the freedom to design courses/programmes "how we want".

Associations with feeling under pressure

Continuing the pattern reported in section 2, teachers who felt under unfair pressure to boost their students' NCEA results were more likely to disagree or strongly disagree with all the positively worded items in Figure 7.

Changes to views about student motivation

As the next two tables show, compared with past responses the proportion of teachers who agreed that NCEA motivates high-achieving students to do their best has increased again. However, support for the view that NCEA motivates underachieving students to do their best has continued to decline.

Table 6 **NCEA motivates high-achieving students, 2007–2012**

NCEA motivates high-achieving students to do their best (agree/strongly agree)	Principals %	Teachers %
2006 responses	39 (n = 194)	21 (n = 818)
2009 responses	65 (n = 187)	41 (n = 870)
2012 responses	76 (n = 177)	51 (n = 1,266)

Table 7 **NCEA motivates underachieving students, 2006–2012**

NCEA motivates underachieving students to do better (agree/strongly agree)	Principals %	Teachers %
2006 responses	75 (n = 194)	42 (n = 818)
2009 responses	67 (n = 187)	35 (n = 870)
2012 responses	56 (n = 177)	30 (n = 1,266)

Note: there was a slight change of wording in 2012 that could be influencing this pattern: "NCEA motivates underachieving students to do their best".

After the 2009 survey I commented that "motivation gains for high achievers may have been achieved at the expense of motivation for those with the greatest learning needs" (Hipkins, 2010c, p. 18). The trends shown in Tables 6 and 7 appear to endorse this conclusion.

There is a very clear relationship between teachers' views about the motivation of both groups: those who strongly agreed NCEA motivates high achievers were also more likely to strongly agree it motivates low achievers. The same pattern held for strong disagreement, and those who were unsure about the motivation of one group were likely to be unsure about both. Thus the differences in support for either statement appear to represent a matter of degree in overall positive or negative responses, rather than a substantively different type of thinking about the needs of high and low achievers.

At the disagree end of the continuum of responses, there are some indications that certain views can be negatively reinforcing—or at least miss some of the positive potential in recent changes. For example, those who disagreed or strongly disagreed that NCEA motivates lower achievers were also more likely to disagree or strongly disagree that they support changes to the way in which literacy and numeracy credits are awarded, or that other subjects could now be used to award literacy and numeracy credits in their school. Used well, the literacy/numeracy changes should provide opportunities to help lower-achieving students lift their learning game by providing more immediate support and feedback about their use of these key intellectual tools (i.e., reading, writing, speaking, etc.) that are so integral to displaying learning achievements (Hipkins, 2012). Opportunities for teachers to experience the mutually reinforcing nature of gains in literacy competencies and overall subject-based achievement could perhaps help shift negative views of these aspects of NCEA.

An *NCEA and learning needs* factor

Five of the items shown in Figure 7, along with two items from Figure 5, combined to form a teacher factor we called *NCEA and learning needs* (teacher $\alpha = 0.77$). Teachers responded in an internally consistent manner to these items, which were:

- *NCEA gives us freedom to design our courses/programmes how we want*
- *The school has good systems for helping students make NCEA choices that keep learning pathways open*
- *Course endorsement has been a positive change to the overall NCEA structure*
- *The range of NCEA standards available allows us to design courses that meet most students' needs*
- *NCEA helps the inclusion of students with special needs*
- *In my main subject area the realigned standards successfully capture the intent of the New Zealand Curriculum*
- *A range of assessment methods can be valid for NCEA*.

In combination, these items broadly encapsulate design aspects of NCEA *and* the ability to leverage these aspects in the school in order to meet specific learning needs. The existence of this factor suggests that there is a strong reciprocal relationship between successfully leveraging opportunities to use NCEA's flexibility and being supportive of its design features.

We also found a similar NCEA and learning needs factor for the principals' responses to five of these items, although it was not as strong (α = 0.61). Note that two items included in the teacher factor (*In my main subject area the realigned standards successfully capture the intent of the New Zealand Curriculum* and *A range of assessment methods can be valid for NCEA*) are not included in the principal factor.

Correlation between teacher factors

For teachers, there was a moderately strong correlation between the *NCEA and learning needs* factor and the *NCEA credibility* factor (r = 0.605). This suggests that views about how well NCEA meets students' learning needs are related at least in part to teachers' overall views of the qualification and its credibility, but other considerations also come into play.

Concluding comments: a still-evolving relationship between NCEA and *NZC*

This section sheds further light on the complex nature of the perceived relationships between curriculum and assessment. Evolving changes to NCEA, made at a time when school professionals' insights into the nature and intent of the curriculum framework itself (i.e., *NZC*) were also still evolving and deepening, are bound to have both intended and unanticipated consequences. *NZC* gives the very clear message that students' learning needs should be central to the design of their programmes, and that in the senior secondary school care should be taken that students are not over-assessed. Furthermore, the overarching framework of *NZC* (its vision statement, principles, values, key competencies and messages about effective pedagogy) signals a shift away from content coverage for its own sake. This also has implications for assessment, but these may only become apparent when the intent of *NZC* itself is well understood.

Initial Ministry of Education-funded support for curriculum implementation focused on working with school leaders to ensure that the intent of *NZC* would indeed be understood. Presumably the objective was that they would then be enabled to lead change in their own schools. However, this section shows continuing gaps between levels of support for recent NCEA changes from principals and senior leaders and from other teachers. These gaps between leaders' and teachers' views were apparent in relation to curriculum thinking in 2009 (Hipkins, 2010b) and they do not appear to have substantively closed.

Gallagher, Hipkins and Zohar (2012) contrast Ministry support for the implementation of an innovative aspect of *NZC* (thinking as a key competency) with government support for the implementation of similar initiatives in Israel and Northern Ireland. A comparison of the different approaches in the three nations leads these authors to the conclusion that working with leaders is important, but so are carefully designed professional learning programmes

and support materials for teachers, and alignment of high-stakes assessment with intended curriculum changes. All are necessary, but none are sufficient on their own to achieve the desired change.

Aligning *NZC* and NCEA demands more complex assessment thinking that takes into account a wider range of purposes for learning a subject. It would appear that some learning areas of *NZC*, and their associated subjects, have achieved congruence between intended curriculum shifts and the newly aligned standards more successfully than others. It is worth noting that teachers in the arts, social sciences and commerce subjects are more likely to be confident that alignment reflects the intent of their subject, are more strongly accepting of recent changes (such as those to literacy and numeracy aspects of NCEA), *and* are in strong agreement that NCEA provides flexibility to meet students' learning needs. This does not seem like a chance combination.

The employment of high-stakes assessments as a means of ensuring curriculum coverage and providing extrinsic motivation for learning (both of which long pre-date NCEA) are particularly problematic in this context. Where NCEA and *NZC* are well aligned, teachers should now be able to design learning programmes in which assessment does not dominate learning, and it seems that for some teachers this is now the case, but by no means all teachers view NCEA's relationship to the curriculum in a positive light. As already noted, the subject they teach is likely to have influenced their views. One possible reason for these subject-related differences is that alignment *does* more accurately reflect *NZC* in subjects such as the arts and social sciences than in the sciences and mathematics. However, if teachers reject *NZC*'s approach to their subject, consciously or not, then they are also likely to disagree with alignment even if, from the perspective of others, the revised standards do reflect *NZC*'s intent. The diversity of views across all subjects suggests there is also an element of this type of thinking behind some responses.

Adding yet another dimension to the already complex mix, externally imposed influences could be bringing differential pressures to bear in different learning areas. For example, during 2012 several science faculty heads brought letters from more than one tertiary engineering school to my attention. These letters specified the exact mix of standards and levels of achievement of those standards that final year students would need to achieve in 2013 if they wished to be considered for a place in that university's school of engineering. Doubtless other university faculties have made similar demands of which I am unaware.

This type of self-interest from tertiary providers puts reform-minded secondary teachers in a difficult position. It is fair to assume that only some students will have an engineering career in mind, yet with current timetable arrangements it is usual for a whole class to study a course assessed with the same mix of standards. NCEA's potential for flexibility is compromised here, as potentially is a future-focused reading of *NZC*'s intent, which could provide the impetus to design non-traditional science/mathematics courses with wider appeal and salience for students. Thus pressure to retain traditional course structures might be one factor in lower levels of support for NCEA, and for perceiving there has been an

appropriate alignment between NCEA and *NZC* among teachers of mathematics and sciences.

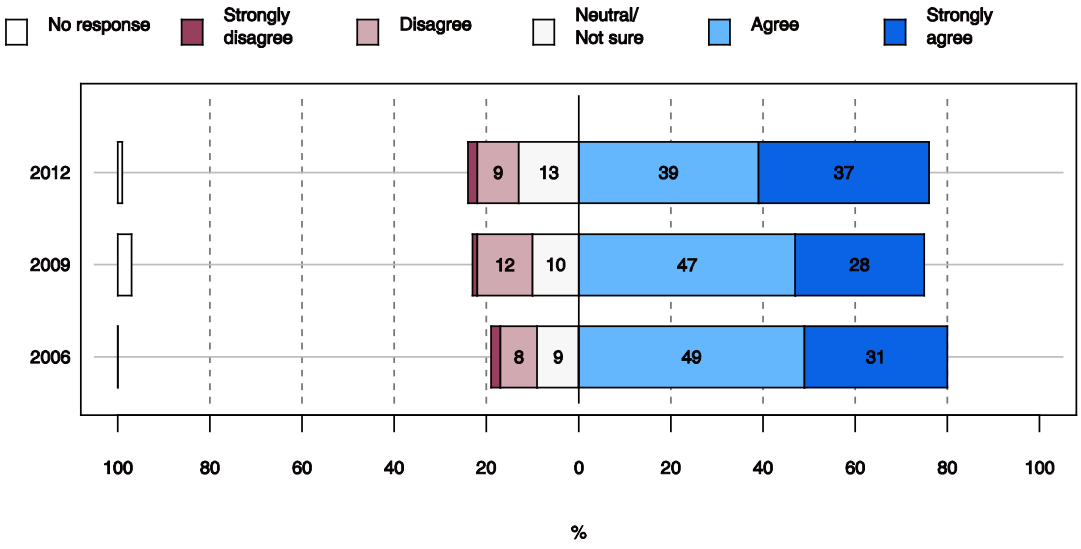
The continuing fall in teacher agreement with the proposition that NCEA motivates lower achievers to *do their best* raises interesting questions about how schools are improving NCEA success for these students. High-level analysis shows success rates for lower achievers *are* continuing to improve.[18] If striving to do their best is not driving these lifts in student achievement, what is? It may be that some lower-achieving students are being encouraged to take courses that are perceived (by the school, and/or by them and their parents) to be easier to pass, regardless of whether success in these areas is personally meaningful and interesting, or useful to them, beyond gaining the actual NCEA certificate. As one commentator on the use of assessment results for accountability purposes has recently observed, "Life chances may also be at stake when the evidence produced by education assessment is used for purposes that do not immediately bear on the prospects of individual pupils" (O'Neill, 2013, p. 5). I return to this complex issue of just how overall achievement levels might best be lifted in section 7.

[18] For an overview and discussion, see Wylie, 2012, Chapter 9; for a more detailed report of statistical trends, see New Zealand Qualifications Authority, 2012.

5. NCEA as the curriculum driver–and as a barrier to curriculum change

This section discusses indications that NCEA's impact on the taught curriculum remains substantial, notwithstanding the completion of the alignment project during 2012. Over the last three survey cycles teachers have responded to the statement *NCEA is driving the curriculum now, even in years 9 and 10*. The next figure compares responses from the 2006, 2009 and 2012 surveys. While overall agreement remains much as in 2009, there was an increase in *strongly agree* responses in 2012.

Figure 8 **Teacher responses to the statement *NCEA is driving the curriculum, even in Years 9 and 10*, 2006–2012**



Given the ongoing work to align *NZC* and NCEA, we had anticipated a different type of shift in the overall pattern. Arguably, the stronger the alignment (i.e., NCEA assessments reflect what *NZC* identifies as important), the less likely it is that NCEA would be seen to be the stronger determinant of the taught curriculum. As Figure 8 shows, however, this is clearly not the case. In fact there are some indications that the influence of NCEA over the curriculum has, if anything, become even stronger. Notice the increase in 'strongly agree' responses between 2009 and 2012: from 28 to 37 percent.

Associations with other variables

As might be predicted given the associations already reported, half the teachers who said their morale was poor or very poor also strongly agreed that assessment drives the curriculum. By contrast, teachers with very good or good morale were over-represented among those who disagreed with this statement.

Interestingly, teachers who held management units (MUs) but who were not faculty heads were over-represented among those who strongly agreed that assessment is driving the curriculum now, even in Years 9 and 10. A quarter of the MU holders were mathematics teachers, which suggests their management units were for a role with a strong quantitative component such as timetabling or school-wide analysis of NCEA data. Such tasks—particularly timetabling—could render the teachers who do them acutely aware of NCEA's interactions with the school's curriculum.

Perceptions of NCEA-related issues facing schools

In 2012 principals and trustees were not asked to respond to the item about NCEA driving the curriculum, but they did have another opportunity to express their views about this. The next table shows three NCEA-specific items that were included in a larger bank of potential "major issues facing the school". The percentages are given for both 2012 and 2009 where the two items could be matched.

Table 8 **NCEA and "major issues facing the school", 2009 and 2012**

Issue	Principals % (n = 177)	Teachers % (n = 1226)	Trustees % (n = 290)
NCEA workload:			
2012	49	58	26
2009	39	46	15
Assessment driving the curriculum:			
2012	47	48	12
2009	34	35	8
NCEA standards alignment	29	30	14

Note the marked increases between 2009 and 2012 in the numbers of teachers, principals and trustees who saw NCEA workload and assessment driving the curriculum as major issues facing their school. Six percent of parents also identified assessment driving the curriculum as a major issue in 2012. (The items about NCEA workload and alignment were not included in the parent survey.) Note also that NCEA workload looms as an issue for a greater proportion of teachers than principals or trustees.

The Post Primary Teachers' Association (PPTA) documented the specific NCEA pressure points via a workload survey of its members carried out late in 2010, looking ahead to the 2011 year (Post Primary Teachers' Association, 2010). In the PPTA survey, developing new assessment tasks and resources ranked highest as a change that teachers anticipated as adding to their workload pressures a little or a lot in 2011, closely followed by adapting content to revised assessment resources and the demands of internal moderation (all 84–87 percent). Their analysis also showed how pressure points can differ for different learning areas and in schools of different deciles.

Other patterns of differences in responses

For the teachers, but not the principals, all three of the items in Table 8 were associated with morale. The pattern was the same in each case: the higher their morale, the lower the

proportion of teachers who perceived each of these aspects to be a major issue facing the school.

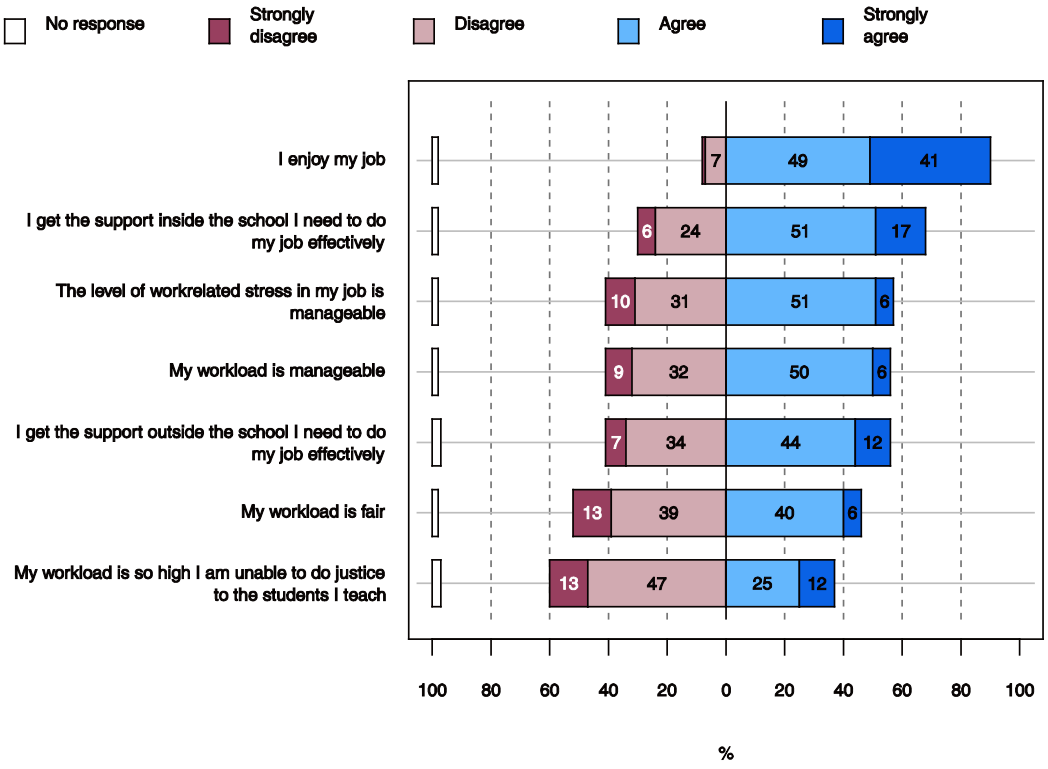
Mathematics, science and computing teachers were more likely than all other teachers to see NCEA workload and the NCEA standards alignment as major issues facing their school. Faculty heads and other holders of MUs were also more likely to see NCEA workload as a major issue, doubtless because they are likely to have additional responsibilities on top of work directly associated with actually doing the assessments (e.g., moderation and other quality assurance processes, records maintenance, reporting to the board of trustees, etc.).

There was a clear decile-related difference in responses for two of the three items: NCEA workload and NCEA standards alignment. In both cases the highest proportion of teachers who saw these as issues for their school were in decile 9 or 10 schools, followed by those in decile 3 to 8 schools, and then those in decile 1 or 2 schools. Principals' responses showed the same decile-related pattern for NCEA workload, but not for *NZC*/NCEA standards alignment.

Other indications of teachers' feelings about their workload

In the 2012 national survey we included a bank of items that looked at workload in general. The responses are summarised in Figure 9. Notwithstanding the workload pressures they feel, most teachers (90 percent) said they enjoy their job. Support to do the job well was more likely to be forthcoming from inside the school (68 percent agreement) than outside it (56 percent agreement). Just over a third (37 percent) thought their workload was so high that they could not do justice to the students they taught, 52 percent disagreed that their workload was fair, and 41 percent disagreed that their workload was manageable.

Figure 9 **Teacher perceptions of workload issues**



How does this spread of responses relate to teachers' views and experiences of NCEA? The six items in Figure 9 formed a factor we called *Teacher workload* (α = 0.83). Cross-tabulations between this factor and all the NCEA items revealed the following patterns.

- Strong negative feelings about workload (i.e., being in the bottom quartile of responses for the *Teacher workload* factor) were consistently more likely to be associated with 'strongly disagree' responses to all the positively worded NCEA responses and 'strongly agree' responses to all the negatively worded items. Negative feelings about the one are clearly associated with negative feelings about the other.
- Those who were relatively less concerned about workload (i.e., in the top quartile of responses for the *Teacher workload* factor) showed the opposite pattern. Strong positive feelings about NCEA were clearly associated with perceptions of being (more or less) on top of workload issues.
- Positive responses (agree, but not strongly agree) to many of the NCEA items showed a different pattern. These tended to be spread across the top three quartiles for workload responses. So feeling under workload pressure was *not necessarily* associated with lack of support for NCEA, except for those who were strongly negative about their workload.

NCEA as a barrier to curriculum change

Almost two-thirds of the teachers (62 percent) said there were barriers to making changes in the curriculum they taught. Twenty-five percent said there were no barriers and 12 percent were unsure.

Teachers were asked to identify specific barriers to curriculum change. As the next table shows, both the assessment requirements of NCEA standards and the time taken for assessment were seen as barriers by a greater proportion of teachers in 2012 than in 2009. In effect, the drop between 2006 and 2009 in the proportion of teachers who had seen these as issues was reversed, so that they again loomed as large as in the earlier years of NCEA. Only *Lack of time* rated higher as a change barrier in 2012, although the percentage of teachers who thought this dropped somewhat compared to 2009 ("lack of time" is shown as a reference point in Table 9).

These increases for the NCEA items are particularly interesting in light of a substantive *decrease* in the percentage of teachers who agreed that there are barriers to making changes in the curriculum they teach: 62 percent said this in 2012 compared to 78 percent in 2009.

Table 9 **Teacher perceptions of NCEA as a barrier to curriculum change, 2003–2012**

Nature of barrier	2003 % (n = 744)	2006 % (n = 818)	2009 % (n = 870)	2012 % (n = 1,266)
Lack of time	50	68	65	57
NCEA requirements		47	38	43
Time taken for NCEA assessments	40	42	30	39

Note: Multiple responses were possible.

Associations with perceptions of NCEA as a barrier to curriculum change

Teachers with good or very good morale were less likely than those whose morale was satisfactory or poor to identify NCEA requirements or time taken for NCEA assessments as barriers to curriculum change.

Mathematics, science and computing teachers were more likely to see NCEA requirements as a barrier to curriculum change and, along with English and languages teachers, to see time taken for NCEA assessments as a barrier to change. Classroom teachers (i.e., those with no specific role in addition to their subject teaching) were less likely than all other teachers to see time taken for NCEA assessments as a barrier to curriculum change.

Not seeing NCEA as a barrier to curriculum change appears to be associated with general confidence in NCEA as a qualification, and with the school's processes for implementing it. Following are some of the patterns of association derived from the survey.

- Teachers who *strongly* agreed that they are supportive of NCEA were more likely to say there were no barriers to making curriculum changes.
- The same pattern held for seeing NCEA as a credible qualification in the wider community and as a valuable record of student learning.
- Teachers were more likely to say there are no barriers to making curriculum changes if they *strongly* agreed with recent changes, including that: course endorsement is a positive change; they support the changes to processes for determining literacy and numeracy; other subjects contribute to literacy and numeracy in their school; and the alignment process in their subject reflects the intent of curriculum.
- Teachers were more likely to say there were no barriers to making curriculum changes if they *strongly* agreed that a range of assessments can be valid for NCEA.
- Teachers were more likely to say there are no barriers to making curriculum changes if they *strongly* agreed that NCEA motivates high achievers to do their best and helps with the inclusion of special needs students.
- Teachers were more likely to say there are no barriers to making curriculum changes if they *strongly* agreed that: NCEA gives schools freedom to design the curriculum how they want; the range of standards available allows the school to meet most students' needs; and the school has good systems for tracking student achievement.

Teachers who agreed or strongly agreed that NCEA motivates low achievers to do their best were also more likely to say there are no barriers to making curriculum changes. The reverse pattern was also clearly apparent: teachers who strongly disagreed that NCEA motivates lower achievers were also more likely to agree that there are barriers to making curriculum changes. This pattern is consistent with the view that declining support for the proposition *NCEA motivates lower achievers to do their best* is linked to concerns about the removal of some unit standards that were seen to provide curriculum flexibility (see section 4).

Teachers who feel under unfair pressure to boost their students' NCEA results were more likely to say there are barriers to making changes in the curriculum they teach. This pattern also held for teachers who strongly agreed that assessment is driving the curriculum now, even in Years 9 and 10.

There were also relationships between teachers' views of their NCEA-related professional learning experience and their views of NCEA as a barrier to curriculum change. These are discussed in section 6, after the relevant items have been introduced.

Concluding comments: the complex, context-dependent relationship between NCEA and *NZC*

Whereas some teachers see NCEA as a curriculum barrier, others do not. Whereas some experience the workload associated with NCEA as overwhelming, others do not. It is important to keep in mind that these patterns of responses are spread across the full spectrum of responses in every subject area and at every decile level. Different contexts undoubtedly generate different external pressures, but not every teacher responds to these in the same way.

Those who did not see NCEA as a barrier and those who were relatively less concerned about workload were more likely to be strongly supportive of NCEA, including the recent changes. These teachers were also more likely to perceive that their school could (in principle) and did (in practice) take up the freedom to design courses to meet their students' learning needs.

Whether or not teachers see NCEA as an enabler of curriculum change in the senior secondary school (or at least not as a barrier) is unlikely to be simply a question of 'can do' thinking. The responses in this section raise interesting indications of decile-related pressures to 'get implementation right' when responding to the recent changes to achievement standards during the alignment process. Section 2 documented comparatively greater principal and trustee awareness of league-table pressures, both positive and negative, in decile 9 and 10 schools. This section reports that teachers in these schools are more likely to report NCEA workload pressures and to see alignment as a major issue facing the school. It is not as if they are more likely to feel under unfair pressure to boost students' results: there were no decile-related differences for that item. Rather, it seems plausible that they feel under pressure to make curriculum and assessment choices that advantage their students by maximising their chances of successfully achieving their academic goals and navigating chosen pathways for ongoing study.

In view of the externally imposed curriculum constraints discussed at the end of section 4, it is worth noting that mathematics and science teachers are over-represented among those who see NCEA requirements as a barrier to curriculum change. Furthermore, given empirical evidence from PISA[19] that internationally high-achieving New Zealand science and mathematics students are more likely to attend decile 9 or 10 or private schools,[20] any pressure from tertiary science faculties might be expected to have a stronger impact in these schools. This could be one of the reasons that teachers in these schools are reporting greater pressure to get their NCEA choices and changes right, with associated workload pressures.

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[19] Programme for International Student Assessment.

[20] For a summary, see Bull, Gilbert, Barwick, Hipkins, & Baker, 2010.

6. Moderation and other professional learning opportunities

Right from the inception of NCEA, teachers have worked together to reach a shared understanding of the levels of performance that differentiate achieve, merit and excellence, as described in the criteria specified in each internally assessed achievement standard. Pre-assessment quality assurance ensures that tasks are designed in ways that provide equitable opportunities for students to demonstrate what they know and can do. Post-assessment moderation aims to ensure that judgements made about the work produced are fair and consistent across teachers, schools and tasks.

Moderation processes have been the subject of criticism on several grounds. First, they are time-consuming and many teachers have worried about the demonstrable escalation of their workloads (see Post Primary Teachers Association, 2010, for explicit quotes related to this source of workload pressure). Second, there has been an impression that processes to monitor and provide feedback on moderation decisions have not resulted in consistent messages about tasks and judgements (Alison, 2005; Hipkins, 2007, 2010c).

NZQA has worked to fine-tune moderation processes and has made recent concerted efforts to ensure greater consistency and helpfulness in moderation feedback. This appears to have paid off. An audit of the consistency of internal assessment processes carried out by the Auditor-General's office recently reported an improvement in the overall rate of agreement between teacher and moderator assessments, which now stands at just over 90 percent (Office of the Auditor-General, 2012).

The provision of best practice workshops is one specific NZQA initiative designed to ensure greater consistency between moderator and teacher judgements. Another, slightly earlier, change was the move to appoint full-time national moderators for most subjects, who would work to develop shared understanding of what is important in a specific standard/task type and hence greater consistency across the country.

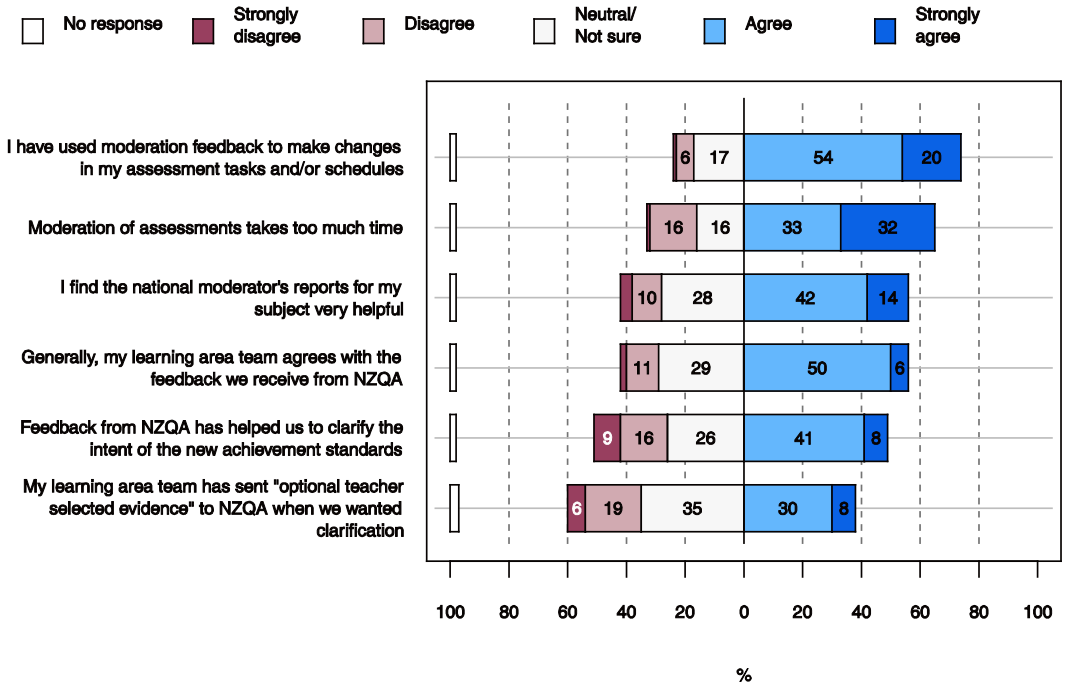
The Auditor-General's office has already reported that the best practice workshops were perceived as useful by three-quarters of the 1,780 teachers who responded to their survey. Annotated exemplars of student work stood out as the support most often seen as *very* useful (61 percent), and best practice workshops were seen as very useful by 51 percent. There was a big drop in frequency to the next item—national moderator reports: while 85 percent of teachers found these useful overall, just 38 percent saw them as *very* useful (Office of the Auditor-General, 2012). Data gathered in the National Survey provide an opportunity to expand on these findings by reporting on the specific benefits teachers perceived from the workshops, and by relating them to other aspects of teachers' work.

Teachers' views on moderation

We begin with teachers' responses to a set of items that probed their views of moderation in general and some specific aspects of moderation practice. Figure 10 shows these items and the patterns of responses.

The majority of teachers said they pay attention to moderation feedback about the tasks they have designed for internal assessments. Three-quarters (74 percent) said they use such feedback to make changes in assessment tasks or schedules. The 17 percent who were unsure would doubtless include a number of teachers who do not have this responsibility, either because they are junior members of a team or because they only teach up to Year 10.

Figure 10 **Teachers' views about moderation feedback and practices**



There are somewhat lower levels of agreement, and higher levels of uncertainty, for all the items that probed the *value* and *use* made of feedback from moderation processes. Just 56 percent of teachers agreed or strongly agreed that moderation feedback is helpful and 40 percent that the team in which the teacher works agreed with this feedback. Some teachers will be uncertain (or have no view) because they are not directly involved, but some could be genuinely uncertain about the quality and helpfulness of the feedback, especially when they are getting to grips with new or revised standards, as has been the case throughout the alignment process.

A different measure of value is whether teachers would voluntarily submit tasks for the moderator's scrutiny (in addition to those they must send as determined by NZQA's sampling processes). Just 38 percent of teachers said they had done this.

The time-consuming nature of moderation

The view that moderation of assessments takes too much time persists: 65 percent of teachers agreed or strongly agreed this is the case, as did 65 percent of principals (see Figure 11 below). Response levels in 2009 were almost exactly the same (teachers, 64 percent; principals, 67 percent).

Those who strongly agreed that moderation takes too much time were also more likely to disagree or strongly disagree that the newly aligned achievement standards for their subject reflect the intent of *NZC*. By contrast, those who agreed that the newly aligned achievement standards for their subject reflect the intent of *NZC* were also more likely to agree with all the other items in Figure 10. In other words, if they are happy with the way in which the new achievement standards reflect their subject, they also support the various moderation processes.

Similarly, those who strongly agreed that moderation takes too much time were also more likely than other teachers to say there are barriers to making changes to the curriculum they teach and that they feel under unfair pressure to boost their students' NCEA results.

Other differences in teacher responses

Morale-related differences were again in evidence. Teachers whose morale is poor or very poor were more likely to strongly agree that moderation of assessments takes too much time. They were also more likely to *strongly* disagree that feedback from NZQA has helped clarify the intent of the new achievement standards, to disagree or strongly disagree that national moderators' reports have been helpful, and to disagree that they agree with feedback from NZQA. Conversely, teachers with very good morale were more likely to strongly agree that feedback from NZQA has helped clarify the intent of the new achievement standards and that they agree with the feedback they receive from NZQA. Teachers with very good or good morale were more likely to strongly agree that national moderators' reports have been helpful.

Again there were also differences related to teachers' main teaching subject.

- Mathematics, science and computing teachers were more likely than all other teachers to disagree, or strongly disagree, that feedback from NZQA has helped clarify the intent of the new achievement standards, that they agree with feedback from NZQA, and that national moderator reports for their subject are helpful. However, there was some evidence that they are being proactive about meeting the implied challenges: they were more likely to *strongly* agree they have voluntarily sent teacher-selected evidence to NZQA for clarification.
- Social sciences, arts and commerce teachers were more likely than other teachers to disagree that they have voluntarily sent teacher-selected evidence to NZQA for clarification, perhaps in part because they were also more likely to indicate that they agree with feedback from NZQA, and to *strongly* agree that they have used moderation feedback to make changes to their assessment tasks or schedules and that national moderation reports for their subject are helpful.

Again there were also associations between responses to the moderation items and the teacher's role in the school. The middle managers (heads of department, deans, other MU

holders) were more likely than all other teachers to *strongly* agree that moderation takes too much time, no doubt because they lead this work. Deputy principals and heads of department were more likely to agree or strongly agree that feedback from NZQA has been helpful, that they agreed with this feedback, and that national moderators' reports are helpful. Along with MU holders, they were also more likely to strongly agree they have used feedback to make changes to assessment tasks or schedules. Classroom teachers were more likely than other teachers to say they do not know if optional teacher-selected evidence has been sent to NZQA for clarification.

Early career teachers (first or second year) were *less* likely than all other teachers to strongly agree that moderation of assessments takes too much time. This group was more likely to be *unsure* about all of the following (shown with the percentage of this group who responded in this way):

- whether their learning area team has sent materials to NZQA for optional clarification (61 percent)
- whether their learning area team agree with feedback from NZQA (50 percent)
- whether they have used moderation feedback to make changes to assessment tasks or schedules (46 percent)
- whether moderation takes too much time (33 percent).

This combination suggests that around half of these early career teachers were not yet fully involved in moderation processes.

Male teachers were more likely than female teachers to disagree or strongly disagree that national moderators' reports are helpful, or that they agree with feedback from NZQA. Female teachers were more likely to *strongly* agree that they have used moderation feedback to change assessment tasks and schedules.

Teachers in decile 9 or 10 schools were more likely to disagree or strongly disagree that feedback from NZQA has helped clarify the intent of the new achievement standards. In line with this response, they were more likely to strongly agree they had taken up the option to voluntarily send evidence to NZQA for clarification. By contrast, teachers in decile 1 or 2 schools were less likely to agree they had done so.

Again there were associations with perceptions of barriers to making curriculum changes. Teachers who agreed or strongly agreed that NZQA feedback has helped them clarify the intent of the achievement standards, who said their faculty team agree with feedback from NZQA, and who find the national moderators' reports helpful, were also more likely to say there are no barriers to making changes to the curriculum they teach. The converse pattern also held: teachers who disagreed or strongly disagreed with these three items were more likely to say there are barriers to making curriculum changes.

Teachers who *strongly* disagreed that they are under unfair pressure to boost students' NCEA results were over-represented among those who strongly agree with most of the items in this set. This makes sense: teachers who do not feel under undue pressure are more likely to be open to exploration and innovation in designing assessment tasks and receiving feedback on these. Confirming this, teachers who strongly agreed that the best practice workshops (see below) have helped them to design better assessment tasks were also more likely to have disagreed or strongly disagreed that they feel under unfair pressure to boost students' NCEA results.

An *NCEA moderation* factor

Four items from Figure 10 combined to form a teacher factor we called *NCEA moderation* ($\alpha = 0.73$). Teachers responded in an internally consistent manner to these items, which in combination addressed the clarity and helpfulness of the feedback received from moderation processes. If teachers were positive about one of these aspects, they were likely to be positive about most or all of them. There are likely to be similar patterns for negative views.

The two items not included in the factor were *Moderation of assessments takes too much time* (a different issue) and *My learning area team has sent 'optional teacher selected evidence' to NZQA when we wanted clarification* (an action that might indicate the team has a different view to the moderator and wishes to resolve this, or that it is beyond the direct control of the responding teacher).

This factor showed only a moderate correlation with the *NCEA credibility* factor ($r = 0.49$) and the *NCEA and learning needs* factor ($r = 0.468$). It would seem that views of moderation are influenced by overall support for NCEA, as we might anticipate. However, this cannot be the full story. Other factors must also influence the relationship between teachers' views of moderation as a professional learning opportunity and other aspects of NCEA-related practice. Further on in this section, relationships between perceived outcomes from moderation workshops and indicators of curriculum thinking are described. These relationships point to teachers' curriculum thinking as being an important factor influencing their reactions to moderation processes and associated learning experiences.

Principals' views on moderation and the use of NCEA data

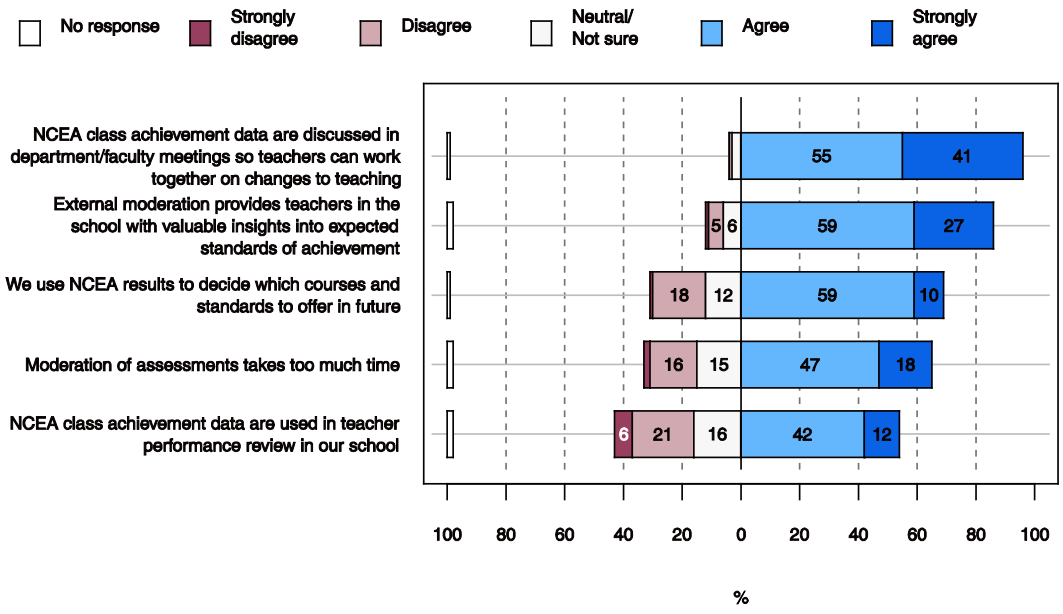
Principals were asked about two aspects of moderation in the context of a five-item set where the other three items concerned the use of NCEA data for various purposes. Figure 11 summarises the results.

Almost all the principals agreed that NCEA data are used in faculty meetings to discuss possible changes in teaching and learning. Many of them (86 percent) believe that NZQA's external moderation processes provide insights that help teachers determine where expected standards for achievement should reside.

Just over two-thirds of the principals indicated that NCEA data are used to determine courses/standards that will be offered in future learning programmes. (For example, a specific standard that was perceived to be unreasonably hard might be discarded and replaced with one where there appeared to be more chance of success for more students.)

The use of NCEA data for performance reviews is not as prevalent as the uses already mentioned. Just 54 percent of principals said they do this. Presumably those who were unsure have delegated this role to other leaders in the school.

Figure 11 **Principals' views about moderation and the use of NCEA data**



We did not find an NCEA moderation factor equivalent to that found for teachers. It makes sense that individual principals' views on the use of NCEA results in a school are more variable across this set of items, since they combine school practices and personal views.

Changes over time

There was no change in the proportion of principals who agreed that moderation takes too much time (65 percent in 2012, 67 percent in 2009) or that it provides teachers with valuable

insights into expected standards of achievement (86 percent in 2012, 87 percent in 2009). There was, however, a sharp increase in the proportion who agreed that NCEA assessment data are used in *performance review* (21 percent in 2009, 54 percent in 2012), although the item was worded slightly differently in 2009 (*NCEA class achievement data is used for teacher appraisal in our school*).

Best practice workshops

Sixty-two percent of the teachers said they had attended a best practice workshop run by NZQA. This percentage rose to over 70 percent for deans and heads of department, who are likely to be leading NCEA-related work in the school. By contrast, just 49 percent of teachers in their first 2 years of teaching had attended a workshop. Anecdotal feedback suggests that, where places are limited or there are inadequate resources to support all teachers in a faculty team to attend, it is the more experienced teachers who get first priority. There were no decile-related differences in attendance.

A clear majority of those teachers who said they have poor or very poor morale (72 percent) had attended a workshop, which suggests that perhaps some of them were shoulder-tapped to ensure they went along.

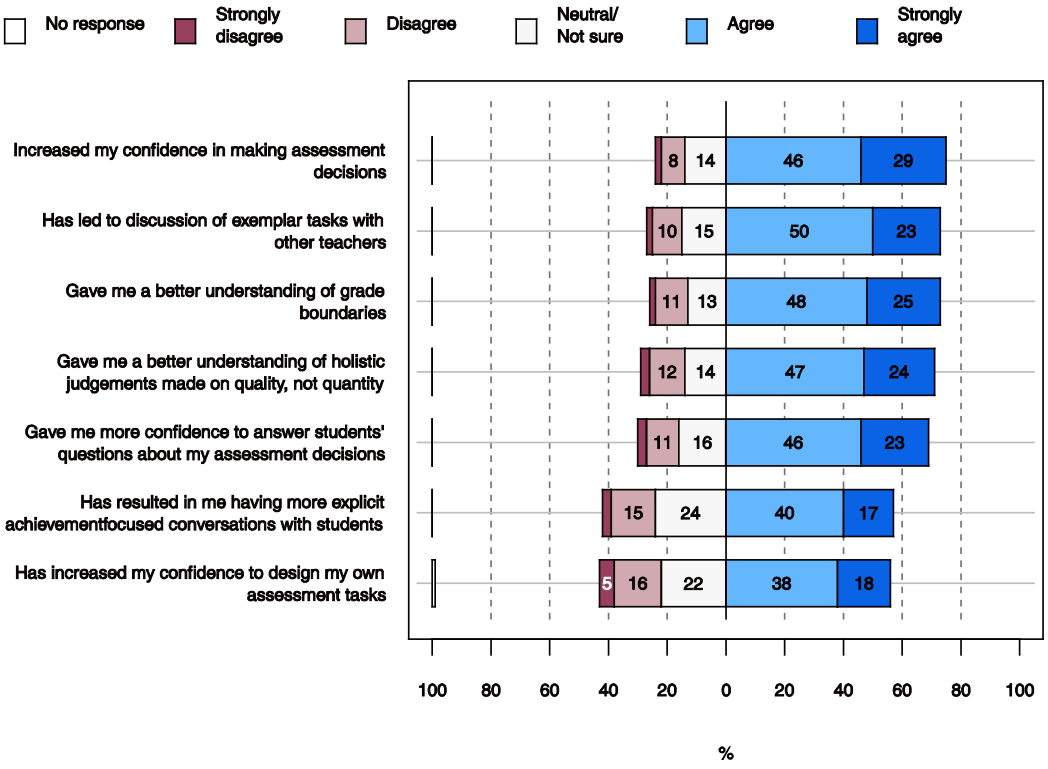
Nearly half (47 percent) the respondents said that attendance at best practice workshops was the only government-provided professional learning support available to them that year. Twenty-one percent were unsure, perhaps because they did not know what other support might potentially be available, or were unsure who had funded other support they had.

Teachers of social sciences, commerce and arts had the highest average subject-related attendance, at 67 percent. They were also more likely than teachers of other subjects to agree or strongly agree that best practice workshops were the only government-provided support available to them in 2012. Teachers whose morale was satisfactory, poor or very poor were more likely than those with good or very good morale levels to say that best practice workshops were the only government-provided support available to them in 2012. Early-career teachers (in their first two years in the role) were less likely than all other teachers to agree with this statement, and more likely to be unsure.

Perceived outcomes of best practice workshops

If teachers said they had attended a best practice workshop, they were asked to complete a short set of items about its value for them. These items were developed in consultation with the NZQA moderation team to reflect the outcomes they aimed to foster. The next figure shows the results.

Figure 12 **Teachers' perceptions of the benefits of best practice workshops**



Note: n = 795.

Close to three-quarters of the teachers who took part in a best practice workshop perceived they had: gained in confidence to make assessment decisions, discussed exemplar tasks with other teachers, now had a better understanding of the grade boundaries, and had gained confidence in making holistic judgements. Two-thirds now felt more confident to answer students' questions about assessments. Note that relatively few teachers actively disagreed that they had gained these benefits: most of the remaining teachers were unsure or did not have a view about specific items.

The workshops were somewhat less successful in stimulating explicit achievement-focused conversations with students (57 percent agreement) or increasing teachers' confidence to design their own assessment tasks (56 percent agreement). Both these activities arguably make demands on teachers' expertise and skills that are more open to scrutiny from others. Conversations with students can be public or private, but there will typically be an element of unpredictability in how the conversation will unfold. Similarly, assessment tasks open up the writer's curriculum/assessment thinking to the scrutiny of other teachers and/or NZQA moderators, depending on how widely the task is circulated. Greater support and further practice appear to be needed in both these areas.

The quotes that follow have been drawn from the open comment section at the very end of the teacher survey, which asked "Do you have any other comments about your work as a teacher?" They capture some of the tensions teachers feel in this important area of their work. Note in particular the desire for more support in the form of already-developed assessment tasks. This concern accords with the lower levels of confidence in writing tasks shown in Figure 10 above.

> There is a lot of time spent writing assessments and then having to change things after moderations and I feel it would be much better if there were more assessments available nationally instead of every school reinventing the wheel and then being told their wheel is wrong. [This] causes a lot of extra stress and workload for classroom teachers when their time would be better spent on actual teaching and improvement of student achievement instead of writing assessments.

> I find the lack of exemplars available from NZQA is frustrating for Design and Visual Communication. Why can there not be a range of examples available at each grade level? It [lack of exemplars] made it very difficult to mark the students' work as a beginner teacher as no one else taught the subject at my school.

> I am a committed classroom teacher but with all the constant change and my responsibilities with schemes and assessments I do not have enough time to complete the work I am capable of for my department. It is really difficult to keep up with all the internal assessment marking and moderation with a department which is large, with large classes and a lot of teachers involved. We have to use lunchtimes a lot for assessment catch-ups and because I have meetings after school on Monday, Tuesday, Wednesday and take Scholarship after school on a Thursday there isn't much time to meet with staff for moderation and other issues.

Differences in patterns of responses

Teachers with very good morale were more likely to strongly agree that the best practice workshops gave them a better understanding of holistic judgements of quality, rather than quantity. Teachers with poor or very poor morale were more likely to disagree or strongly disagree with this statement. The same pattern held for increasing their confidence to design their own assessment tasks. There was also a similar overall response to the item *Has led to discussion of exemplar tasks with other teachers*, although the responses in this case were not quite as sharply polarised.

Mathematics, science and computing teachers were more likely than teachers of other subjects to be not sure or to disagree that the best practice workshops gave them more confidence to answer students' questions about assessment, that they gained a better understanding of how to make holistic judgments based on quality not quantity, or that they now have more achievement-focused conversations with students.

There were no overall differences related to the teacher's role in the school.

Teachers in decile 1 or 2 schools were somewhat more likely to be unsure if best practice workshops had given them a better understanding of holistic judgments of quality, not quantity, or that the workshops had given them more confidence to answer students' questions about assessment. Teachers in decile 9 or 10 schools were somewhat more likely to disagree with both these statements.

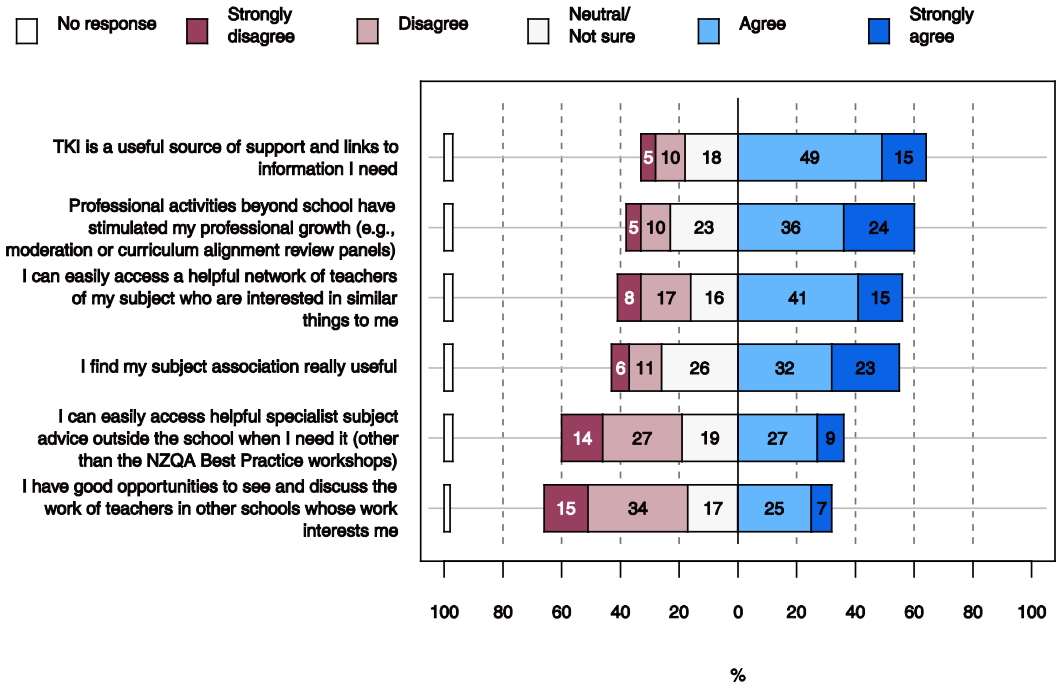
Relationship between workshop outcomes and two indicators of curriculum thinking

There were clear associations between teachers' responses to this set of items and perceptions that there are barriers to making curriculum changes, and to views on *NZC*/NCEA alignment. Views on NCEA/*NZC* at both ends of the continuum appear to be coherent. Teachers who *strongly* agreed that all the described outcomes of the best practice workshops had been achieved were more likely to say there are no barriers to making curriculum changes. Furthermore, around three-quarters of the teachers who strongly agreed that the standards in their subject reflect the intent of *NZC* also strongly agreed that all the described outcomes of the best practice workshops had been achieved. By contrast, teachers who disagreed that the workshop outcomes had been achieved were more likely to say there are barriers to making curriculum changes. Similarly, teachers who *strongly* disagreed that the standards in their subject reflect the intent of *NZC* were more likely to disagree that they had achieved the intended outcomes from the best practice workshops.

Teacher networking and subject support

Six items from a larger, more general bank about teacher professional learning were found to form a moderately strong factor that we called *Professional learning networks* (teacher α = 0.73). This suggests that individual teachers are likely to respond in a similar manner to most of these items, which are shown in Figure 13.

Figure 13 **Teachers' views of subject-specific support**



Almost two-thirds of the teachers (64 percent) said they have found the Ministry of Education-funded website Te Kete Ipurangi (TKI) a useful source of support material and links to other information that secondary teachers need. Given that TKI provides a portal to a wide range of resources explicitly for senior secondary schooling, and it links directly to relevant NCEA sections of the NZQA website, this is not particularly surprising.

More concerning is that a third of the teachers were neutral/unsure or disagreed that TKI is a useful source of support. Teachers who said they find TKI useful were also more likely to disagree that best practice workshops are the only source of government-funded support available to them in 2012. Again this is not really surprising, but it puts the spotlight on those teachers who do *not* recognise TKI as providing government-funded support. There could be a need for these teachers to gain greater awareness of what TKI offers.

Sixty percent of the responding teachers said they had been involved in professional activities beyond the school that contributed to their professional learning. This was the highest rating type of *non-virtual* professional learning support for the items in this factor. Examples could be involvement in external assessment duties, moderation conversations, or participation in *NZC*/NCEA alignment activities.

Just over half (55 percent) said they have found their subject association really useful. However, only just over a third (36 percent) agreed they can easily access specialist subject

advice outside the school, with a similar proportion (32 percent) agreeing that they have good opportunities to see and discuss the work of teachers in other schools.

Notice the high levels of uncertainty/non-response selected by between 16 and 28 percent of teachers for every item in this factor. The highest levels of uncertainty related to whether the subject association is really useful. This suggests some secondary teachers are unaware of the work of subject associations, which are run on a voluntary basis but are often active both regionally and nationally in supporting the teachers who do participate, and contribute with curriculum and assessment-related challenges and innovations. Alternatively, some may have chosen not to be involved in a local subject association, or have had mixed experiences if they had been involved in the past.

Differences in responses relate to a range of contextual factors

All but one of the items in Figure 13 showed patterns of association with morale. Teachers who said their morale was very good were more likely to strongly agree, those whose morale was good to agree, and others to be unsure or disagree with these times. The exception was *I find my subject association really usefu*l.

Almost half (49 percent) of year 1–2 teachers were unsure if their subject association is really useful. Compared with all other teachers, this group was also somewhat more likely to be unsure if they can easily access specialist subject help outside the school if they need to.

More males than females were unsure if *TKI is a useful source of support and links to information I might need*. Male teachers were also less likely than female teachers to strongly agree with this statement.

Teachers in decile 1 or 2 schools were less likely to agree and more likely to be unsure if TKI is a useful source of support. This was the only decile-related difference for the items displayed in Figure 13.

English and languages teachers were more likely—and science, mathematics and computing teachers less likely—than all other teachers to *strongly* agree that TKI is a useful source of support, or that they can easily access a helpful network of subject teachers who are interested in similar things to them. Science, mathematics and computing teachers were also less likely than all other teachers to *strongly* agree or agree that they have good opportunities to see and discuss the work of teachers in other schools if they are interested in this. Social sciences, arts and commerce teachers were more likely to disagree that they can easily access a subject teacher network.

There were also some indications of associations with the teacher's role in the school. Classroom teachers were more likely than those with leadership roles to be unsure or disagree with all of these items. Specialist classroom teachers were more likely than other

teachers to *strongly* agree that they can easily access specialist subject help or a network of similar teachers when needed and that TKI is a useful source of support. Deputy and associate principals were more likely to *strongly* agree or agree that they have good opportunities to see and discuss the work of teachers in other schools where that interests them. Heads of department were over-represented among those who strongly agreed that professional activities outside the school have stimulated their professional growth.

There were regional differences for two of these items. Teachers whose nearest Ministry of Education regional office is Auckland North or Christchurch were more likely than those in other regions to strongly agree they can access a helpful network of teachers in their subject area. Those whose nearest office is Whangarei were more likely to disagree or strongly disagree with this statement. Teachers in the Dunedin area were more likely to strongly agree that they find their subject association really useful, while those in Nelson were more likely than teachers in other regions to disagree or strongly disagree.

Associations with moderation-related professional learning experiences

Taking part in professional activities beyond the school appears to be a valuable background to bring to moderation activities at school. Teachers who strongly agreed that such activities have contributed to their professional growth were more likely than all other teachers to also strongly agree with all but one of the moderation items shown in Figure 10. The exception was that they were more likely to strongly disagree that moderation takes too much time. The converse pattern also held clearly: teachers who disagreed that professional activities beyond the school have contributed to their professional growth were more likely to disagree with all these items except that moderation takes too much time, with which they were more likely to strongly agree.

This same pattern of associations with the moderation statements in Figure 10 broadly held across the other five items in Figure 13. Strongly networked teachers who feel they can access support when they need it are more likely to find moderators' reports and NZQA feedback helpful and to seek and use this feedback to make adjustments to their practice. They are also less likely to perceive that moderation takes up too much time.

The pattern of associations between the items in the *Teacher professional networks* factor and the items describing desired outcomes from best practice workshops (Figure 12) was similar, if not quite as clear-cut. Again those teachers who had taken part in professional activities beyond the school appear to have derived the strongest benefits from the best practice workshops: they were likely to strongly agree with *all* the outcomes items shown in Figure 12. A similar pattern held for agreeing that TKI is a useful source of support. Other network items were positively associated with some of the workshop benefits but not others.

In terms of deriving the most benefit from the workshops, the network factors with the least apparent impact were opportunities to observe teachers in other schools and finding the subject association really helpful. This might partly be because there were lower rates of overall agreement with these two items. However, all of the workshop outcomes were clearly associated with having easy access to specialist subject help when needed, yet this item also had low rates of overall agreement. This suggests that improved access to specialist subject help would potentially have the greatest impact on lifting overall levels of the moderation practices promoted during the best practice workshops.

Concluding comments: achieving productively aligned professional learning

This section provides indications that teachers' views about *NZC*/NCEA alignment and the benefits of NCEA-related professional learning experiences are aligned if they are strongly held. Those who strongly agree with the alignment as enacted, and who do not think there are barriers to making curriculum change, were more likely to have derived benefits from their NCEA-related learning experiences. At the other end of the continuum of responses, those who strongly disagree with alignment as enacted, and who perceive barriers to making curriculum change, were much less likely to perceive that their NCEA-related professional learning experiences achieved their desired outcomes. Like some of the overall patterns reported in earlier sections, this does not seem especially surprising. But perceptions are powerful drivers of practice, and the pattern does point to the need to address teachers' curriculum thinking—not just assessment thinking and practice—if changes are to be understood and accepted.

Patterns of association with the belief that moderation takes too much time further highlight the importance of being able to reconcile curriculum thinking and assessment emphases. Curriculum issues might be perceived in relation to purposes for learning (e.g., newer curriculum emphases might be misunderstood or rejected), or in relation to the manner in which these newer curriculum emphases are interpreted via the assessment tasks developed for the aligned standards. In either case, thinking through the tensions these issues reveal is bound to be time-consuming. It is also likely to be quite emotional work, given how strongly many secondary teachers identify with their subject-specific roles.

The associations between other professional learning opportunities and reactions to the best practice workshops put the spotlight on those teachers who do not appear to have the benefits of strong support for their personal learning. It is very clear that not being networked appears to limit the professional learning value that teachers gain from professional moderation activities. There is a chicken-and-egg question here: which comes first, the inclination to seek out support and hence embrace learning opportunities, or the access to support, which in turn provides the confidence to undertake professional learning challenges? No doubt there is a mix of these two types of influence among different teachers.

Without support networks and other rich professional learning opportunities, however, the question of which comes first is moot. Just 12 percent of teachers who responded to the 2009 National Survey came into the category of having very good levels of what we called "achievement-focused sharing" between teachers. For 25 percent, such sharing was poor, very poor or non-existent (Wylie, 2010).[21] This highlights the uneven access to rich professional learning in different school contexts. Being strongly networked with teachers in other schools might go some way towards compensating for weak leadership of professional learning in one's own school, but, as this section shows, it is more likely that the 'rich will get richer' than that those who lack opportunities at school will proactively seek them elsewhere—and be able to find them easily.

Important equity issues are raised by this dilemma, with implications for both teachers and students. The recently announced target of having 85 percent of young people achieve an NCEA Level 2 award or equivalent by 2017 renders even more acute the issue of how best to support teachers to make the changes needed to better support all students to achieve. Responses to this new policy are documented in the next section of the report.

[21] The equivalent analysis for 2012 is yet to be undertaken at the time of writing this report.

7. Achievement targets for Level 2 NCEA

One question in the 2012 survey asked, "What changes, if any, are likely at your school in relation to the new national target of 85 percent of 18-year-olds achieving NCEA Level 2 or its equivalent in 2017?" Respondents could choose one of four options. The responses of principals and teachers are shown in Table 10.

Table 10 **Principal and teacher perceptions of school changes in response to the NCEA Level 2 target**

	Principal % (n = 177)	Teacher % (n = 1,266)
We are making changes all the time in our efforts to increase the number of students gaining NCEA Level 2 or its equivalent	56	71
No change in our current planning is likely; our student achievement levels are on target	32	13
No change in our current planning because our rate of achievement is increasing; we think we will meet the target if we keep on with what is working for us	8	5
No change in our current planning is likely because we think this target is not realistic	3	6
No response	1	5

NB: Columns may not sum to 100 percent because of rounding.

Teachers are more likely than principals to be actually implementing efforts to lift achievement, whether planned at the whole-school level or not. This doubtless explains why a greater proportion of them said they were making changes all the time in an effort to lift achievement levels, and fewer of them said their achievement levels were already on target.

Differences in teacher and principal responses

Teachers in decile 9 or 10 schools were more likely than teachers in schools of any other decile to say no change was planned because student achievement levels were already on target. Congruent with this, they were less likely to say they were making changes all the time to increase students' success in gaining NCEA Level 2.

Interestingly, there was no equivalent decile-related difference in principals' responses. There was, however, a difference related to the number of Māori students on the roll—a variable that is confounded with decile. Principals in schools with fewer than 7 percent of Māori students on the roll were more likely to say their achievement levels were already on target and less likely to say they were making changes all the time. The opposite pattern was seen for principals in schools where Māori students comprised more than 30 percent of the roll: two-thirds of these principals said they were making changes all the time in an effort to lift achievement levels.

Teachers of mathematics, science and computing were more likely than teachers of any other subject to say they had made no changes in current planning because the target was not realistic. Teachers in the social sciences/languages cluster were more likely to say no change was planned because student achievement levels were already on target. Interestingly, this was one of very few items discussed in this report where we found no differences associated with morale.

Elaboration of responses

The closed question about specific actions was followed by a space for teachers and principals to make comments on the 85 percent target if they wished to do so. Thirty percent of teachers and 51 percent of principals made a comment. These comments were coded using the themes shown in the next table, ranked by teacher responses. Expressed as a percentage of each whole group, no one area stood out as a widely shared concern. For both groups the most commonly expressed view was that the target was "unrealistic": terms such as "ridiculous" and "not practical" were also used.

Note that principals were somewhat more likely to comment on big picture issues such as the design of pathways through the school. Note also that the type of comment more typical of negative media reporting of NCEA (e.g., cheating to raise the school's success profile) was

expressed by very few teachers or principals, but these comments tended to be strongly expressed.

Table 11 **Thematic spread of comments on NCEA Level 2 target**

Theme	Principals % (n = 177)	Teachers % (n = 1,266)
Target is unrealistic	9	10
Increases in achievement levels would devalue the qualification	4	4
Need for different types of courses, unit standards, etc.	8	3
Issues for pathways/transitions	7	3
Lack of alignment with other aspects of NCEA	5	2
Perverse incentives for cheating/fudging	1	2

Both positive and negative comments were made in relation to some of these themes. Obviously, viewing the target as unrealistic, lack of alignment between this and other aspects of NCEA, and seeing an increased likelihood of cheating (but not usually by the respondent's own school) were framed in negative terms. But comments about pathways and the need for different courses were sometimes framed as a positive challenge.

A small number of teachers (1 percent) said they did not have a view about the 85 percent target and associated school actions because they only taught students in the lower secondary school years or because they were relievers who worked in different schools. Another small group of teachers (1 percent) said they did not know about the target at all.

Positive but sometimes qualified views

Overall, principals were much more likely than teachers to make positive comments. They typically affirmed the importance of the target, or said the school was already meeting it. In the latter case, quite a few acknowledged that this was no cause for complacency:

> We already are above the target as an average for all Year 12 students—however we want to ensure students of all ethnicities are above the target: our Year 12 Pasifika students were just short of 85% in 2011. (Principal)

Even when principals expressed reservations about their ability to meet the target, the general tenor of these comments was nevertheless supportive of its importance:

> We are close to the target but have a large ORS funded unit [Ongoing Resourcing Scheme for students with severe disabilities], and for them this

> target is very difficult. Also we attract into our Services Academy a group of students who have not been well prepared elsewhere to allow NCEA Level 2 to be an achievable target, often in just one year. (Principal)

Some principals described specific actions the school had already taken:

> We have rewritten our L2 curriculum so that the majority of our students will be aligned with Youth Guarantee pathways. (Principal)

> Reviewing Year 12 and 13 course structures to better engage students at lower end of academic scale. This includes consideration of participating in a regional Trades Academy. (Principal)

> Stronger focus on literacy and numeracy at Year 9 and Year 10. Reflected in charter. Senior curriculum structural changes—semester approach rather than traditional Feb–Nov course selections. Students able to reselect in June. (Principal)

Compared with the principals, fewer teachers made comments with a positive tenor. Even when they did so, these comments were likely to express reservations about how the changes they could see were needed would actually be enacted in the school, or about the impact on their own workload:

> Currently 94% of our students who make it to Yr 13 attain Level 2 or higher. Time is needed to vet individual students' courses and create pathways but for careers I have 5 hours per week. The whole school approach [to] Benchmarks has been limited in emphasising this to school leaders. We are focussing on Māori and Pasifika with strength based mentoring and other approaches. (Teacher)

> I am designing and implementing L2 and L3 ESS [Education for Sustainability] courses that suit students with low and medium abilities. These courses are totally internally assessed and include some Biology and Chemistry AS [achievement standards] as well. It is more pressure on teachers (e.g., time to mark the papers) but makes a difference to students. (Teacher)

> I suspect that more than 15% of our Year 11 students will achieve Level 1 numeracy via the functional Unit Standards and be unlikely to take Maths at Level 2. Hence this target may be unrealistic at the moment, but we will work towards that by 2017. (Teacher)

A range of reasons for holding negative views

Teachers were much more likely than principals to express negative views of the target. Some comments made refer to the perceived difficulty of specific subjects, although different reasons were stated or implied regarding what made these subjects difficult:

> It's a phenomenally unrealistic goal in my discipline: Mathematics. (Teacher)

> I find the target to be unrealistic. I personally feel unfair pressure as a teacher to reach these goals, especially in the subject of English in a school where the majority of students are second language learners. (Teacher)

If teachers did not perceive that specific changes could and should be made, and if the target was seen as wishful thinking, then a strong sense of futility, and even despair, comes though:

> It is like rearranging deck chairs on the Titanic. (Teacher)

> It's all just words, a good sounding 'sound bite', but also slightly insulting to teachers as it implies that we have been coasting and could have been doing it already if we had been doing our job properly already. (Teacher)

> The management are sceptical about the targets and foresee more dumbing down and school cheating on their results, which they already believe happens anyway. The credibility of the proposed changes is seriously doubted and therefore little energy is being spent on how to lift the achievement. In my opinion the most critical changes must take place at Years 9 and 10. The depth and quality of the foundation determines the height and quality of the building that can be erected. Some school managers need to realise that they have the capability and resources to make the changes that are necessary—what is lacking is vision. (Teacher)

Note that this teacher explicitly states that the school's management is not supportive of the policy. Although negative comments from principals were in the minority, many teachers will be in schools where the policy had not been fully discussed. There are implications here for the avenues explored to communicate the full scope of the policy.

Some comments alluded to tensions between the 85 percent target and aspects of the way NCEA processes are managed, or a seeming lack of alignment between this target and other recent NCEA-related decisions. For example, five teachers expressed the view that higher targets cannot be reached because the proportions of students gaining achieve, merit and excellence passes in external assessments are predetermined by NZQA. While not common, it is concerning that these comments appeared to be based on a misunderstanding of

procedures now used to maintain overall stability in achievement levels in externally assessed standards:[22]

> How can you change this with NZQA having such rigid bell shaped distribution marking schemes? It is a system with built in failure mechanisms. Has anyone told NZQA about this 85% target? (Teacher)

A few principals and teachers expressed frustration that the work to align NCEA and *NZC*, which included a review of the "standard" at which achievement standards are set, seemed counterproductive[23] to the aim of raising achievement for a wider range of students:

> English and mathematics standards: reviews/changes will now make it harder for many students to achieve Level 2. The effect will be to push many average / below average students away from studying maths (especially) any longer than is compulsory. This is counterproductive and is a built in incoherence in NCEA. (Principal)

Similarly, various other aspects of qualifications policies and procedures were a source of frustration if they were seen to run counter to teachers' ability to design courses to meet their students' learning needs:

> The restriction on Domain based credits for UE [University Entrance] restricts how courses can be compiled and we do not have two domains within one course anymore. (Teacher)[24]

> I find it very difficult when NZQA in August decides to change who can access certain special assessment conditions without consultation with Principals Nominees, SENCO [special needs coordinators] or assessors. This affects our most vulnerable students where we have a history of helping them succeed at our school. (Teacher)

Underlying some negative comments from both principals and teachers there appeared to be a view that not everyone *should* be able to achieve Level 2 NCEA. This was in essence a

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[22] Data are kept concerning the overall distribution of award levels (NA/A/M/E) for each achievement standard. If there is a significant shift from one year to the next, the assessment process is investigated. Shifts that can be satisfactorily explained are allowed to stand, but if the variation reveals year-to-year discrepancies in the judgements made, steps will be taken to address the issues that come to light.

[23] In fact, overall NCEA achievement levels did not drop in 2011, as might be predicted by this statement; see New Zealand Qualifications Authority, 2012.

[24] This restrictive policy has been recently altered but some teachers appeared to be unaware of the change at the time of responding to the survey. See Hipkins and Spiller, 2012, for an extended discussion of the dilemma to which this teacher refers.

normative view that the qualification will be devalued in the eyes of the wider community if it becomes the universal target for all students.

> It is meaningless. If it is achieved, the universities simply raise the bar for university entrance, and other measures are taken to ensure there is an ample supply of 'under qualified' school leavers available to employers for 'unskilled' work. (Teacher)

> What equivalent are we talking about? If we lower the goal posts then everyone will pass. Simple. It is the height of the goal posts that matters and when these students enter the work force/higher learning they will be surprised that they can't cope. We are setting these kids up to fail after school by assuming that all will get to this level. (Teacher)

> Like all assessments of student achievement that also are used to rank a cohort, inflation of the number of achievements devalues the system and another measure will be found to separate out the groups of individuals. It is likely that lifting the achievement rate of students at Level 2 will result in the search and use of a ranking system other than NCEA. This is already happening with Cambridge exams which are regarded as having a higher status than NCEA and therefore lifting those students who achieve it to a higher position on the ranking ladder. (Teacher)

These and other similar comments appear to assume that NCEA *should* sort students for certain types of ongoing learning and its value lies in relative scarcity. Qualifications are for those who are university bound.

A few comments suggested that the inevitable lowering of standards would be achieved by making greater use of internal assessment. In the next comment there appears to be an assumption that performance under stressful examination conditions, and deploying hand-written communication, is of greater worth than other types of demonstrations of learning:

> Use the system: do less externals to improve results. This does not mean students are performing at a higher level—the ability to write intelligently has decreased over recent years. They just have more time and the use of a computer to help their writing in internal assessments. (Teacher)

Comments made by a small number of teachers related to their conditions of work and a view that the target was setting them up for failure if their students were not successful. No principals made comments of this kind.

> I feel it's always our fault when kids don't achieve! Maybe the stupid ministry should stop changing everything every year so people actually know what is

> going on. Or maybe provide some decent exemplars, or timely feedback after external exams, or stop piling on the workload with every other initiative added to what we are supposed to do, or stop expecting us to raise the kids completely. (Teacher)

A related concern was that differences in students' backgrounds, and in external influences on their ability to succeed, would have an impact on some teachers and schools more than on others:

> We all need goals but those who don't make it will look like failures regardless of the quality of the cloth they are working with. Student economic environment, home environment and peers determine much of their attainment. Schools making huge improvements in student achievement may seem to be failing when they are actually very successful. (Teacher)

> Too many students truant: poor families do not insist on education for their children. Too many changes for education to keep up, paperwork and more paper work takes away from actual teaching contact time with students. Too much teaching to specific assessments. 85% is a very high target. (Teacher)

A concern for the educational consequences

Some comments addressed the *educational* consequences of setting an 85 percent NCEA Level 2 target for all 18-year-olds. They differed from the outright negative comments in that the focus was on what is best for students. For example, some principals and teachers worried that the target would encourage schools to design courses to be assessed by standards perceived to be easy to achieve. Such courses would not be in students' best interests if gaining these standards was not useful for them.

> The target is easily measured but could and does already lead to schools offering students low level courses to help them gain Level 2. We do not believe it is the right target. Gaining success in 'academic' courses is more valid. (Principal)

> The value of NCEA Level 2 qualification is highly dependent on the subjects taken and their usefulness in future employment or courses of study. There are too many fun type courses/classes that are really not worth much to many of the students as they don't lead to proper jobs or courses that are likely to be of use for future employment or studies. (Teacher)

A related concern was that the target would exacerbate the tendency for students to focus on credit accumulation rather than on learning that they valued for other reasons. Several of the

teachers who made this type of comment noted the potential of the policy to side-line the intent of *NZC*:

> This is causing teachers to teach even more rigorously to the assessments. Because of this target I feel that the MOE [Ministry of Education] is telling us that the NZ curriculum is much less important than ticking the boxes on dumbed down assessments. The only time I feel like I am really teaching interesting and useful stuff (and the key competencies) is in Years 9&10, without the pressure of an assessment looming every few weeks. Thank goodness for the 'lost years' as a recent media article called them. (Teacher)

> The model is philosophically flawed. It correctly points out that its goal is to create lifelong learners, but then demotivates them by making them do all this assessment which will fail them, because it is not what they want, hold valuable and can relate to. (Teacher)

More principals than teachers worried that their school would need new types of courses that were not currently available, and wondered how these could be resourced:

> With a wide variety of students needs in a moderate sized school, it is difficult to cater for the range of needs. Gateway and STAR funding is insufficient. (Principal)

Several teachers commented on the need to adjust the timing of courses to give students a better chance of success:

> Lowering the number of standards [used to assess a course] but still teaching the curriculum content —just not assessing. [Students would be] more likely to pass with higher level of achievement. Also [they would have the] motivation to work to achieve. (Teacher)

> For a percentage of students Level 2 needs to occur over two years so students can work at a slower pace with more success and deeper/sustained learning. (Teacher)

Some teachers appeared to be unaware that the target does not apply exclusively to secondary schools:

> Depends on whether it is just for those left at school aged 18 or those who started Year 9. What about those who left? Don't they matter? (Teacher)

> Many students achieve the equivalent of NCEA L2 through completing US [unit standards] in tertiary settings soon after leaving school. This appears to be

> missing from the statistics. Schools prepare them for tertiary courses and students continue to gain US in areas of their own choosing. Failure to acknowledge this aspect of the education system is iniquitous. (Teacher)
>
> This target has in effect raised the school leaving age. Some students do not suit school and this needs to be reflected in other options students have to gain further qualifications. (Teacher)

In contrast to both the above types of response, when alignment and co-operation between providers is seen to be working well, teachers were much more positive:

> The development of contracts between polytechnics and our school has offered a range of opportunities for those that are getting 'past their use by date' at school by Y11, and further broader thinking is needed to meet the much more than academic learning of our students. It is exciting to see students attend AE [alternative education] with its different approaches and to see them excel and thrive becoming wonderful citizens in our community. (Teacher comment)

A small number of teachers and principals commented that some students would be better suited to leaving school early and entering the world of work, without first gaining NCEA:

> There is a problem for schools who have to enrol all comers when NCEA data are used to judge schools against each other. The reality is some young people would be better off in entry level employment—they can hide away and cruise along by staying at school—delay growing up and facing reality. I feel strongly that in these situations we are doing favours to these young people [by sending them out to work] as their self esteem diminishes. (Teacher)

Concluding comments: success for all?

Some comments in this section indicate the continuing prevalence of a view that high-stakes assessment *should* sort students according to a normative view that privileges certain types of academic learning, with university-bound pathways as the target for the most successful. More academically challenging learning *is* an important foundation for ongoing learning, but school learning needs to support *every* student to experience themselves as capable of being a successful and ongoing learner. Two deeply entrenched sets of assumptions about learners are discussed and challenged below.

First, the traditional binary differentiation between academic and vocational students: *both* academic *and* more practical learning gains need to be valued for what they are, not pitted against each other. However, those subjects long perceived as being more academic (English, mathematics, science, history, etc.) have been key to the use of high-stakes assessment as a

sorting mechanism. Assessment truly has been high stakes here because so many students were set up to fail under the previous qualification system. The thought that, with appropriate forms of curriculum support, greater numbers of students could raise their achievement levels in these important foundational subjects confronts the view of these subjects as gatekeepers of academic quality. Unless and until this sorting view changes, some teachers, with an over-representation of those who teach the gatekeeper subjects, will likely continue to regard efforts to reach the NCEA Level 2 target with suspicion or outright scorn.

Second, the expectation of success for *all* students confronts long-held assumptions about the nature of intelligence and learning capacity. High expectations need to be grounded in the belief that all students can make learning gains, regardless of their starting point, given adequate and appropriately targeted support, combined with sufficient personal effort and self-belief. Both students and their teachers need to believe in this possibility for it to come about. Parental beliefs and attitudes are also likely to be influential here.

In summary, all types of learning success need to be acknowledged and valued, not just more traditional academic achievements. This was, of course, a foundational intent of NCEA, although the two-tier design of NCEA, with three-level achievement standards to assess more academic learning and pass/fail unit standards to assess more vocational learning quickly acted to further entrench pre-existing distinctions between academic and vocational courses (and students) (Hipkins & Vaughan, with Beals, Ferral, & Gardiner, 2005). Ongoing adjustments have served to perpetuate this academic/vocational binary—or at least have failed to challenge it.

Nevertheless, the continuing consolidation of support for NCEA, as documented in section 2, together with the introduction of the 85 percent target, does present another opportunity to refocus on the original intent of NCEA. For this opportunity to be productive, both sets of assumptions outlined in the preceding paragraphs will need to be confronted and addressed. Whether it would be more productive to do this head-on by keeping the focus on NCEA itself, or more indirectly by (re)positioning *NZC* in the forefront of teachers' curriculum thinking, is the question addressed in the final section of the report.

8. Strengthening the relationship between NCEA and *NZC*

Contexts for educational change and reform matter a great deal. The focus of this report has been on NCEA-related practice in *secondary schools*. However, NCEA is also used to assess learning in some tertiary settings. Curriculum and assessment practice in these institutions is beyond the scope of this report but will doubtless "wash back" (East & Scott, 2011), at least to some extent, into public perceptions about NCEA. Furthermore, NCEA is itself part of a wider system of qualifications reforms that were intended to create a seamless National Qualifications Framework (NQF). Juggling the diverse interests of different groups with a vested interest in an NQF doubtless resulted in some of the uneasy compromises that continue to have an impact on how NCEA works in schools.

Section 7 noted the unresolved tension between the use of qualifications for sorting purposes and for credentialing a wider range of types of learning. The continued use of both achievement and unit standards in secondary school courses has done nothing to ameliorate this tension, and indeed has often acted to perpetuate pre-existing judgements about the lesser value of more practical learning (Hipkins et al., 2005). Professional learning that aims to shift value judgements and beliefs is made more demanding if those views are tacitly held (Timperley, Wilson, Barrar, & Fung, 2007). Alongside this professional learning challenge, there is growing recognition that *structural reforms* to, or within, a qualification system cannot be expected to bring about change in what actually happens in practice.

New Zealand is not alone in facing this dilemma. A recent review of qualifications reforms in 16 nations noted the prevalence of problematic expectations that national qualifications framework reforms, *per se*, can drive related reforms in other aspects of practice:

> Countries that have been most successful have been those that have treated the development of frameworks as complementary to *improving institutional*

> *capability* rather than as a substitute for it or as a way of re-shaping institutions, and have seen *outcomes of qualifications and programmes leading to them as intimately related* rather than separable. (Allais, 2010, p. 4, emphasis added)

What, then, might constitute a more productive focus for "improving institutional capacity"? The second half of this quote points to a strongly inter-related and simultaneous focus on both qualifications and curriculum. However, as Cathy Wylie recently noted in her book on the impact of the *Tomorrow's Schools* reforms:

> Ten years after the introduction of NCEA, there appears to be much more coherent support offered by NZQA. But it is confined to technical aspects of assessment: it does not cover curriculum content and purpose, and pedagogy. Recent studies of schools' initial interpretation and use of the New Zealand Curriculum are pointing clearly to the need for 'ongoing and innovative alignment work' between the New Zealand Curriculum and NCEA (and the National Standards) (Cowie, Hipkins, Keown, & Boyd, 2011). We need much more coherent joint work to really progress secondary students' learning. (Wylie, 2012, p. 235)

In this book Wylie looks back with regret on the loss of strong professional learning interconnections between schools that were once provided by school inspectors and advisers. She points out that NZQA's subject moderators focus on supporting assessment processes rather than "broader and deeper matters of subject development and pedagogy" (Wylie, 2012, p. 229). Furthermore, the recent alignment project

> did not provide a single clear overarching rationale for the review, nor did it systematically bring together people with different expertise—curriculum specialists, professional developers and teachers, people who understood the new key competencies and the challenge of weaving them through 'subjects'. That kind of co-construction would have been able to yield a set of standards that would take teaching and learning further. (Wylie, 2012, p. 233)

I suggest that it is not too late to circle back to a renewed focus on the curriculum. Doing so could be one effective means of moving teachers' thinking away from the strong traditional framing of ability and of sorting purposes for assessment, especially if it was combined with a simultaneous focus on removing the continuing differential between unit and achievement standards.

To highlight the potential in foregrounding the curriculum, I want to report on one further set of relationships in the survey data. In 2009 one survey item appeared to act as something of a bellwether for teachers' overall curriculum thinking. This item stated, *There is too much emphasis on student voice and similar ideas nowadays*. Teachers who did not agree in 2009 (i.e., they thought students should have more say in their learning) were more likely to

understand that *NZC* implementation would challenge them to make greater use of authentic contexts, use more self and peer assessment, create more pathways though the senior secondary school, and make other such changes with a focus on placing each student's learning needs at the heart of their learning programme. In short, they understood why and how *NZC* positions success for all students at the heart of the curriculum (Hipkins, 2010b).

We repeated this student voice item in 2012 and the overall the results were much the same: 25 percent of teachers agreed or strongly agreed (compared to 26 percent in 2009), 33 percent were unsure or neutral (34 percent in 2009), and 40 percent disagreed or strongly disagreed (39 percent in 2009). Cross-tabulating this item with all the NCEA-related items discussed in this report shows that a teacher's view about student voice continues to be a very clear indicator of their curriculum/NCEA thinking. If they believe that students should have a greater say in their learning (i.e., they disagree there is too much emphasis on student voice), teachers are also likely to:

- be supportive of NCEA, and see it as credible and a valuable record of student learning
- not see barriers to making changes in the curriculum they teach
- agree that the curriculum gives them flexibility to design courses to meet their students' learning needs, and that there is a range of standards they can access to do so
- support the recent changes to NCEA, and agree that it can motivate both high and low achievers to do their best
- disagree that students have too much responsibility for their NCEA choices, and agree that the school has good systems for tracking these choices
- agree that alignment reflects the intent of *NZC*, and that a range of assessments can be valid for NCEA, and disagree that they are under unfair pressure to boost students' NCEA results
- disagree that moderation takes too much time, and agree that moderators' reports are helpful.

The converse pattern also held: teachers who agreed that there is too much emphasis on student voice were less likely to be supportive of all the described aspects of NCEA, and more likely to say there are barriers to making curriculum changes, to see moderation as taking too much time and students as having too much responsibility for their assessment choices, and so on.

As in almost all the responses documented in earlier sections, teachers who held the combination of positive views were likely to have high morale. Senior leaders were over-represented in this group, while mathematics teachers were over-represented in the group who took the opposite position.[25]

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[25] In 2009 science teachers were also over-represented in the group who thought there was too much emphasis on student voice, but they were more evenly spread along the continuum of possible responses in 2012.

It seems that teachers who have made and understand the shift *NZC* demands in curriculum thinking are also likely to understand and be supportive of NCEA and its evolving processes, and to be in schools with good systems for tracking NCEA achievements. We cannot, of course, tell which comes first, but there is ample evidence in this report that NCEA reforms, and the professional learning associated with these, are more likely to be resisted by those who hold strongly to a traditional view of the curriculum. Changing the qualification system is not enough. Curriculum thinking has to change too. If assessment is not just for sorting and learning is not just for assessment, then other *purposes* for learning need to be imagined and enacted.

Some learning areas of *NZC* currently go further than others in signalling a move away from learning traditional content for its own sake. One example is the move in the Learning Languages learning area from a grammar/translation approach to a communication focus, where what is valued and assessed is students' ability to use their language learning to communicate in ways demanded in real-world contexts (East & Scott, 2011). Another example is the shift in the history curriculum towards an emphasis on fostering capabilities in historical thinking, developed through contexts that might previously have been represented as "done and dusted" narratives.[26]

This variability (i.e., greater shifts in some learning areas than others) adds a layer of complexity to the ongoing curriculum support needed to shift NCEA thinking. Where new standards have supported recent curriculum shifts, teachers need to understand and accept the *curriculum* changes or they will struggle to understand the intent of the standards. However, if alignment does not adequately reflect curriculum change (and only 52 percent of teachers think that it does), then either:

- teachers might be happier that traditions have been maintained, but frustrated that they still have to get to grips with standards revised for no good purpose (from their point of view), or
- they will be frustrated that the shifts in assessment emphases have not gone far enough in reflecting the intent of the curriculum.

Some of the complex tensions at play here could help explain why, unlike principals and parents, teachers' views that NCEA is a valuable record of student learning have not increased. Where teachers do not agree that what is now being assessed is what *should* be assessed (i.e., because of a break with tradition), they might not value the learning record as highly as they would a more traditional suite of assessments. This could explain why teachers in decile 9 or 10 schools were more likely to be unsure if NCEA provides a valuable record of student learning (pressures to maintain a traditional curriculum can be higher in these schools, and are arguably exacerbated where the school offers the Cambridge qualification as an alternative to NCEA). The other possibility, as indicated in some of the open comments,

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[26] *History Matters* (Harcourt & Sheehan, 2012) includes a number of teacher-authored chapters that discuss this challenge from a range of perspectives

is that teachers who do not think NCEA provides a valuable record of student learning could be concerned about overall quality of the learning actually achieved if and when gaining credits becomes an end in itself rather than an acknowledgement of valued achievements.

All in all, this report points to teachers' curriculum thinking as being at a critical juncture with respect to NCEA. Those who see and agree with synergies between *NZC* and NCEA are getting on with the job of supporting all their students to succeed. Workload is just as pressing for them as for other teachers (this item was not associated with teachers' position on student voice, for example). In spite of this, they are pushing forward with higher morale and a strong belief in the benefits of the changes they are making for student learning.

The situation is very different for teachers whose curriculum thinking and assessment thinking are out of step—with each other and/or with NCEA itself. Perhaps deeper curriculum insights, gained via carefully designed and supported professional learning programmes, combined with ongoing reforms (e.g., where *NZC*/NCEA are not yet fully aligned, and to tidy up the achievement standard/unit standard differential), might help them make sense of the tensions that are undoubtedly blighting their working lives, with benefits both for them and for the students they teach.

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